Languages: Computation or communication? Gender issues in curricular foreign language acquisition

Thesis

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Languages: Computation or Communication?

Gender issues in curricular foreign language acquisition

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Abstract

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Do boys and girls learn differently? The perception of Modern Foreign Language learning appears to show that there is an increasing gap between the attainment of boys and girls. In this research I have chosen to focus on the secondary school context and particularly on two main questions:

- Do boys and girls display different aptitudes when learning a Modern Foreign Language?
- Does a difference in teaching style affect learning in a secondary school context, either when comparing boys and girls, or when comparing the learning of German or French in similar contexts?

The first phase of my research involved conducting aptitude tests, initially using the MLAT-E, as developed by Carroll and Sapon. This test, conducted in English, was originally intended to demonstrate whether learners have an aptitude for learning a Foreign Language, by focussing on phonetic coding, grammar handling, rote memorization, inductive language learning ability. A test written and performed in English may provide some insights into students' aptitude for learning a foreign language, but in order to investigate differences in learning either French or German, I developed further tests,

using the same principles, but which were conducted in French and German. In both of these tests there appears to be no significant difference between the performance of boys and girls in the specific context, and no significant difference between the two languages.

It is often assumed that boys learn by breaking tasks down into clear cut rules, and girls learn by following examples. Using a range of inductive and deductive teaching strategies, students were taught how to use the simple future tense in French and German. Students were observed during the teaching phase, both during whole class activities, and in group work situations, and were interviewed after completing their final assessments, to ascertain how they managed the tasks. When comparing students' understanding and application of the simple future tense, I could again, observe no significant difference between boys and girls, or between the learning of German and French.

This research has been conducted among a range of mixed ability classes in KS3 (age 11-14) in a comprehensive school. This action research is significant for teachers of Modern Foreign Languages in the secondary school, as we move forwards from the new KS2 MFL curriculum component. The questions remain, however, as to why there is still such a disparity in the results of boys and girls at GCSE and how teachers can encourage boys in their pursuit of language learning.

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1 Introduction

1.1 Background

In this section I will lay out the reasons for, the relevance of and the various foci of my research.

There has been much said of the differences between the achievement of boys and girls in education. In recent years, it appears that girls are overtaking boys by achieving higher results at Key Stages 2, 3 and 4, in other words, the defined phases of school life at which formal testing is conducted in a range of skills, at ages 7, 11 and 14. In this research, I intend to investigate whether there are specific differences between the performance of boys and girls when learning a Modern Foreign Language within the context of the secondary school classroom. It is important to make clear at this point that I am concerned with the methods of acquiring a foreign language within the context of an educational setting, where the prime purpose for learning is to meet certain pre-defined criteria in order to pass exams, rather than for the purpose of natural conversation.

In recent years, and particularly since the introduction of League Tables, many secondary school teachers have found themselves in a position of having to focus more on the end result in the form of achieving examination grades through a rigorously followed syllabus rather than the means to the end of teaching to communicate in a modern foreign language. Under this system, successful learning outcomes are measured by successful

examination grades, and these learning achievements are believed, not always correctly according to Illich, to ensure public trust (Illich, 1971). Learning in secondary schools in England is measured by a series of quantifiable indicators; achievement is measured by tangible progress through a series of National Curriculum (NC) levels, and external exam grades. Public accountability requires that clearly defined targets are met. The external demonstration of success for the individual student, the teacher and the school is, therefore, represented by achievement in measured standards. Therefore, for the purposes of this research, I will consider learning in the context of the secondary school to be defined as, using the appropriate measuring tools with which students are familiar, and for which they have been prepared.

Although there are differences in the acquisition of a foreign language and a second language, I have chosen to use the term 'curricular Foreign Language Acquisition' to denote that the acquisition of a Modern Foreign Language is contained within the context of a school curriculum, and is subject to the requirements of the National Curriculum in secondary schools in England and Wales.

In recent years, schools have had to adapt to changes in the curriculum which have resulted in students being able to choose whether or not to study a MFL beyond age 14. This has led schools to reappraise the teaching of MFL, and in some cases, to introduce Fast Track courses facilitating the completion of GCSE courses in MFL by students who are 14 years old, and

who sit the GCSE examinations at the end of year 9, which traditionally marks the end of Key Stage (KS) 3. The group of students I selected for this research come from Fast Track classes at a comprehensive school in Essex. The research focuses on two main questions:

- Do boys and girls display different aptitudes when learning a Modern Foreign Language?
- Does a difference in teaching style affect learning in a secondary school context, either when comparing boys and girls, or when comparing the learning of German or French in similar contexts?

I intend to ascertain whether there are any specific demonstrable differences in the ways that boys and girls react and respond to different teaching strategies in the MFL learning process, and by identifying these, to relate the strategies to aspects of the MFL curriculum, and, if appropriate, making recommendations for change, which will allow boys and girls equal access to high levels of achievement.

With this in mind, I feel that the inherent differences between French and German, structurally, grammatically and communicatively, could provide some clues as to why boys and girls perform differently in each language. For the purpose of this research, I will look at girls' and boys' study and acquisition of French and German only.

As a basis for learning styles, I shall investigate constructivism, symbol – processing and computational approaches to learning within the context of

curricular foreign language acquisition, through the medium of inductive and deductive teaching styles.

The importance of learning a second language in the context of the school curriculum appears to have diminished in recent years. It is no longer required that all students in the secondary phase of education in the UK study a second language to the end of KS4. In many schools, the perception of success of learning an MFL, combined with the status of the A*-C successes within the school and in external statistics, such as League Tables, has seen a resultant fall in the number of students opting to learn a language beyond KS3. This will, I feel, lead to a decline in the perception of the relevance of MFL learning, and has already left students with the view that learning a language is 'hard'. Learners' views, as highlighted by Lightbown and Spada (1999), will affect learning:

> Second language learners are not always conscious of their individual learning styles, but virtually all learners, ..., have strong beliefs and opinions about how their instruction should be delivered. These beliefs are usually based on previous learning experiences and the assumption (right or wrong) that a particular type of instruction is the best way for them to learn.
>
> (Lightbown & Spada, 1999, p. 257)

The advantage for teachers of MFL has traditionally been that the learners come fresh, with no prior knowledge of learning a second language in school, and therefore, although the learners have strong opinions about which learning styles have worked for them in the past, the context of

learning MFL is a new experience, and learners have to begin to form new beliefs about the delivery of instruction. However, with the growth of interest from the Primary phase in the introduction of a second language at KS2, this is already changing. For the purposes of this research, I investigated the views of learners who have had no prior knowledge of learning a language in a curricular setting.

The area in which the school is situated can have a significant effect on any research of this type. It is important to note the socio-economic environment in which the students live, as well as whether their surroundings contain multi- or mono-cultural influences.

The majority of parents are very supportive of the school's examination policy and encourage their children to succeed in GCSE examinations. When discussing their children's progress in MFL, most parents admit to having found language learning difficult when they were in school, and therefore find it difficult to assist their child, however, they are supportive of language learning within the school environment. Very few parents have a functional knowledge of any language other than English; however some express the desire to learn another language. When discussing their own experience of language learning at school, the majority of parents to whom I have spoken seem to view language learning as a mysterious experience, remembering either only a few simple phrases, or the difficulties they faced when learning complex grammatical forms. The parents are generally supportive of the concept of MFL learning in school, and are, in most cases, keen for their child to do well. However, when asked, both parents and children can only see the value of learning another language as being useful on holidays,

rather than for economic or employment prospects. In recent years, a small number of parents have asked whether Spanish could be taught on the school curriculum, as they perceive Spanish as being a more useful language for holidays than either French or German. Students do not enter the MFL classroom without preconceived ideas of what language learning involves, as Anderson expressed in his view that "students' attitudes were affected by parents' and siblings' attitudes to and experience of the … languages." (Anderson, 2000, p66)

There are two distinct strands to my research question - whether gender affects achievement in MFL learning, and whether, by the nature of gender, students innately express different learning styles in the MFL classroom. There was a third area in my initial research question, which considered the role of preference of language learning, however, I now realize that it would be too ambitious to include preference in language in this research. In my own school context, students do not have a direct choice over which language they learn, and do not have experience of learning a second modern foreign language, so research into preference over one language or another would not be appropriate here, as the students themselves would lack valid comparison within their own field of experience.

Much has been written in recent years on the questions of gender issues in education, however, there appears to be more of an emphasis on the sociological aspects of gender rather than a focus on how the genders

respond to the learning process. I have found that it is only since the recognition that girls were outperforming boys in all aspects of education that the debates have begun to focus on how the various learning styles affect boys and girls. Since I began teaching, I have observed differences in boys' and girls' preferred learning styles, and it is for this reason that I wish to research this area further.

My prime interest, therefore, is the way gender differences are manifest in learning, but as a means to articulate this, and focus a specific research area, I have chosen to look at the way differences in teaching styles can affect learning style. For the purposes of this research, I shall assume that learning styles represent the innate way of accumulating knowledge, whereas learning strategies can be acquired, selected and rejected according to the perceived needs of the learners.

1.2 School Context

The school in which I currently teach is an oversubscribed 11-16 comprehensive in South Essex, with around 1190 students. The school in which this research is carried out is situated in a predominately monolingual and monocultural community. According to the Office for National Statistics, around one third of the population of the local district council area is employed in supervisory, clerical, junior managerial, administrative or professional fields, with a further third of the population employed as skilled, semi-skilled or manual workers. Around one in seven of the population aged

over 16 receives state benefits, is unemployed, or works in the lower grade jobs. (See Appendix 4) The school population of 1192 students is representative of these figures, with a much lower than the national average number of students with entitlement to Free School Meals, and also mirrors the cultural identity of the county. Currently around 95% of both the school population and the population of Essex are categorized as 'White, British'. There are six students within the school for whom English is an additional language.

All students take either French or German, and are allocated a language largely at random. There is the opportunity for those with a particular interest in one language over another to request a place in those classes. A very large majority of students entering the school have had little or no experience of, or exposure to, other languages, as the surrounding areas are predominately monolingual and monocultural. As the Primary MFL programme has been introduced, students now have varying exposure to some MFL learning. Of all the feeder primary schools, the majority offer French, which means that students now entering the school at Year 7 are able to identify and reproduce some words and phrases in French.

Since September 2005, students have been 'set' in year 7. Each language cohort involves 120 students who are divided into 4 sets, based solely on Key Stage 2 information and external assessments in English, Mathematics and Science (raw SATs data). Refinements in the setting procedures are made through using verbal and numerical reasoning tests at the beginning of

Year 7. It may be possible in the future to identify students' language aptitude through additional testing (e.g. MLAT-E), however currently, students are allocated to sets based on the results of KS2 SATs. Although year 7 students now arrive equipped with some knowledge of a Modern Foreign Language, as the Primary MFL curriculum is beginning to roll out, prior knowledge is not taken into account when deciding sets.

The school is a designated Business and Enterprise College. The notions of Business and Enterprise are firmly embedded into all aspects of the school curriculum, and each student is required to study at least one Business or Enterprise subject to GCSE. MFL is not strongly placed within the school curriculum. Since the requirement to study an MFL to GCSE level was removed, the number of students choosing to take an MFL has dropped significantly. This is partly due to student choice, partly due to competing space on the curriculum, and partly due to the lack of space for additional options. At the time when I began this research, there were 6 GCSE classes in Key Stage (KS)4. There are now no KS4 GCSE groups. Instead, two classes of students are required to take their GCSE in year 9. From September 2010, all other students complete their MFL learning at the end of year 8. Modern Foreign Languages do not, therefore, hold a significant status within the school, and students are not actively encouraged to learn a language other than English. This change has happened gradually throughout the period of the research.

The prime measure achievement recognised by the school is the GCSE (or GCSE equivalent) examination grades. Students are given Target Grades on

entering a GCSE (or equivalent) course, and are expected to achieve these grades, The monitoring of teacher performance under the current Performance Management system includes the setting of clearly defined targets based on percentages of grades C and above in GCSE examinations. Whole school targets are set, again based largely on the percentage of students achieving Grades A*-C. The role of the GCSE examination is therefore the driving force behind the perceived success of the school, and therefore, rightly or wrongly, of learning.

There are 32 students allocated to the 'Fast Track' classes in year 7 – one class each in French and German, and the remaining three sets in each language are positioned by ability. 10% of students in each language are "disapplied" from language learning, to give them the opportunity to spend more curricular time on core subjects. The 'Fast Track' GCSE group is a recent innovation in the school, with the second cohort having completed their GCSE exam in 2009 after only three years of learning a foreign language in school, as opposed to the traditional 5 year GCSE programme encompassing Key Stages 3 and 4. The Fast Track programme involves students taking GCSE French or German in year 9, as opposed to year 11, The Fast Track classes retain the continuity of their current teacher, where possible, throughout their three year learning program, with all MFL staff eventually becoming involved in teaching the Fast Track classes. As the program rolled forward, I was able to access to a range of years from which to select students for research, but was also able to have access to a range of teachers. For future research, I will be able to assess the influence of the

teacher on learners' experience by replicating research across a growing range of classes.

When considering the effect of gender on learning styles, the gender of the teacher may also be considered a factor. Of the four members of the MFL team, two are female and two are male, however, currently the teaching groups which have achieved and completed GCSE are both female, which does not allow scope to compare the external gender influences of having a male or female teacher. None of the teachers are native speakers of French or German, but all four have English as their mother tongue, and all four teach their preferred language to the Fast Track students.

The rolling program allowed the initial study to be conducted with only year 7 and 8 students, however, for the main research I had access to a full range of KS3 classes, involving students in years 7-9. For the main research and observation of how students use and apply a particular grammatical form, I selected students from year 8, as they had had the opportunity to acquire sufficient knowledge of the language and its structures to be able to transfer this knowledge to the acquisition of a new grammatical form, and apply it. As a part of the MFL team, it was important to consider my joint roles as researcher and teacher, and to make an effort to maintain my independence as a researcher, while simultaneously discharging my professional duties as a classroom teacher of one of the classes involved in the research.

2 Literature Review

My research questions are drawn from my professional experience, but in the context of reading through the literature, these questions have changed and evolved. The literature review provides a context for my investigation and examines the work of other researchers related to the research questions. For example, when I first began to think about this research, I was aware of the part learning strategies has to play in achievement, however my perspective has shifted to my own role as a teacher, consequently my research focus changed to an investigation of teaching styles with a particular emphasis on deductive and inductive teaching styles.

The literature available is as vast as the subject matter itself, however, as a practitioner in the field, I feel that I have both the experience and the classroom skills necessary to investigate this question at ground level, rather than from a purely theoretical point of view.

Given the wealth of literature available, it becomes necessary to look at various strands beginning with a wider view of the frames of reference that can be used to investigate the subject in theory, methodology and practice. Armed with a general overview, the questions can be refined by considering a range of approaches which can be seen in the context of my research questions. These can then be refined further by considering specific work which has been completed in this field, and discerning whether or not these studies can also inform my research questions.

The literature under review falls into three broad categories of gender, teaching and learning styles, and assessment techniques, which will provide a measure of any differences or similarities in learning as experienced by the learners involved in my research. It is at times difficult to disentangle these themes, as they overlap in many aspects, however what interests me is the point where the themes converge, as the answer to the question of whether boys and girls learn a language differently, and indeed what specific differences exist where the worlds of understanding gender, aptitude and learning styles collide. However what I have not covered in this literature review is the issues of motivation and behaviour as they relate to learning. Although these have been cited by many as possible reasons for underachievement in boys, my research is not concerned as much with underachievement per se, but with what boys and girls *can* achieve in language learning in the secondary school context.

It would be useful at this point to define concisely what I intend by using terms like “gender”, “learning”, “aptitude” and “achievement”. Within the context of this research, I will use the term “gender” to refer to whether the students involved present as a boy or a girl. This is not meant to ignore the shades of difference between the range of masculinities or femininities (Davies, 2007) or the more complex theoretical concept of gender identity (Burke, 1989) or even to imply that the physical presentation of being male or female means that the participant is one gender or the other. Similarly, I do not intend to imply that a gender neutral state is possible:

> 'Gender' cannot be 'solved' in that there is no possibility of gender-neutral systems, nor is there an over-arching 'female' or 'male' gender essence that pedagogy can address.
>
> (Ivinson & Murphy, 2007, pp5-6)

My use of the term 'gender' recognises the physical status of participants as they are recorded in a range of education based statistical reports including school records, class records, and examination records. In a recent report on Gender and Education, whilst not explicitly defining the use of the term 'gender' the DfES similarly used the term to refer only to the difference between boys and girls. (DfES, 2007)[1]

Within the school context, learning is measured in quantifiable outcomes, as discussed earlier. For the purposes of this research, therefore, learning is measured using similar quantifiable means such as National Curriculum levels or GCSE examination results. These are the standard criteria used by the school, future employers, the Department for Education in determining the relative outcomes of learning. The same indicators are also used to offer students places in further education courses and universities.

Those who write on the subject of Second Language Acquisition interpret learning in a different way from secondary school teachers – Krashen makes

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[1] The Department of Education, as it is now known, is the government department which is responsible for education policy. Since 1964, when the Ministry of Education was replaced by the Department for Education and Science (DES), the department responsible for education policy has been variously known as Department for Education (DfE) from 1992, Department for Education and Employment (DfEE), from 1995, Department for Education and Skills (DfES) from 2001, and Department for Children, Skills and Families (DCSF) from 2007. All publications are cited under the name of the Department which published them.

a distinction between learning and acquisition and his idea of successful communication. Hymes' idea of Communicative Competence, where the goal of learning is to communicate is at odds with the secondary school's goal of passing exams. I must add at this point that I do not necessarily agree with the purpose of secondary school language learning as being to pass exams, however, MFL teachers are often constrained of League Tables and School Performance Targets and Performance Management Targets, which leave them in the position of having to teach to pass, not teach to learn.

Within the parameters of learning as the term is used in schools, students are also measured by aptitude, ability and achievement. In this case, aptitude is used to show whether there is a tendency for the student to display natural skills (Robinson, 2005) in a particular area of the curriculum – they may be gifted in music, display a talent in sport, or have a flair for languages, and therefore aptitude shows what can potentially be achieved, given that the learner already possesses some tendency to develop their achievement themselves. Aptitude is often used as a synonym for ability, however, using the terms synonymously does not recognise the difference between internal and external influences - there may be present in a learner an internal gift, talent or flair, but the external influence of teaching and learning can allow the ability to become apparent. The term "achievement" is used in schools as a tangible and quantifiable demonstration of what has been learned, as a combination of skills, aptitude and abilities; therefore, it makes sense to use this definition in this research.

In my title, I have used the terms “computation” and “communication” to demonstrate the differences between how learning can take place – either by working things out, or by talking it through.

Modern Foreign Language learning is a relative newcomer to the UK education system. The inclusion of a Modern Foreign Language as part of the school curriculum was opposed by such luminaries as John Stuart Mill, and Matthew Arnold in his capacity as Inspector of Schools. Mill (1867) was not opposed to learning a language per se, but recognised that school was not the ideal place to acquire sufficient knowledge of the language to be able to communicate with others. Arnold, on the other hand, felt that learning a foreign language in school would not serve a purpose, but that learning about foreign literature would be of benefit (Pratt, 2007). Despite such opposition Modern Foreign Languages were introduced into the curriculum, and all students must now learn a language until the end of Key Stage 3. The question of how languages should be taught and learned has provided linguists with a constant dialogue of how best to ensure that languages can be taught and learned. Hawkins (1981) reminds us of John Locke’s now famous comment that “French should be talked into the child...Grammar is only for those who have the language already”. This is a point also made by Comenius, when he states that “No language should be taught by means of grammar” (Comenius in Keatinge, 1910) and yet it is this constant challenge of creating a balancing act between grammar and understanding which confounds language teachers to this day.

The introduction of the National Curriculum, and its insistence that all communication be conducted in the Target Language, contradicts Comenius' suggestion that grammatical points be explained in the vernacular. The National Curriculum has since its introduction, eased the requirement to use Target Language for all forms of communication during the lesson, and since 1999 (DES, 1999) allows for grammatical points to be explained in English, as using only target language in the classroom had provided immense challenges for language teachers, and the benefits of doing so did not seem to be conclusive (Meiring & Norman, 2002).

With a history of discussion and argument over the best way of teaching a foreign language, and the constant introduction of new methodologies, from immersion to grammar translation methods, from audio-visual to Virtual Learning Environments, it is small wonder that both students and teachers alike can become confused about not only what must be taught and learned, but also which methods, styles and practices may be the most effective.

By asking the question: 'How do boys and girls learn?' gender seems to be the obvious first port of call, and naturally leads towards a second question: 'How do boys and girls learn a Modern Foreign Language in the Secondary school environment?' At this point I have decided to concentrate on texts which probe the background to gender issues in the UK education system, and move from there to an understanding of learning styles, and the validity of assessment, while considering whether the language learning can be considered computation or communication.

Only through assessing how students' learning takes place will we be able to analyse the relative merits. For the purposes of my research, these discrete areas are connected by their relevance to the Modern Foreign Languages classroom, and lead to the question of whether a computational or constructivist style has any influence on the style of language acquisition, and indeed whether boys and girls tend to prefer one style over another.

2.1 Gender

For over three hundred years, gender issues have been discussed from a feminist perspective (see Spender, 1983). Freedman identifies three major theoretical frameworks within the literature on contemporary feminist thinking: "The first view accepts gender difference, the second criticizes the notion of difference, and the third attempts to go beyond difference."
(Freedman, 1990)

In this research I am not primarily concerned with gender differences in general, but with the more specific focus of gender issues within the context of education, and more specifically within secondary school education within the UK.

John Stuart Mill argued that women have not achieved the success that men have and thus appear less intelligent than men, not because women have a different moral or intellectual nature than men, but because they had fewer opportunities and an inferior education (Mill, 1869).

In recent years, however, a plethora of literature has come to light, in an attempt to explain the role of gender in education.

The idea of criticizing the difference between genders was carried forward by the Equal Opportunities Commission (EOC) following the introduction of a National Curriculum in England and Wales in 1988. The EOC prepared a report which contained guidelines on how schools should offer "equal access to the SAME CURRICULUM" (sic).

The report goes further to admit that the existing education system, even at the time when the National Curriculum was being introduced, had in-built gender bias:

> Certain of the core and foundation subjects are already sex-biased. Generally speaking boys predominate in science and technology and girls predominate in the arts including modern languages. It is evident that if the objectives of the National Curriculum are to be attained, then steps will need to be taken to identify and eradicate factors which cause sex-differentiation of this nature. This is not necessarily a legislative matter but the EOC is empowered not only to eliminate sex discrimination.
>
> (Equal Opportunities Commission, 1989, p7)

Even as the National Curriculum was being introduced, it was seen that there were differences inherent in education; however, the differences of gender in schools seemed to be limited to subject choice and expectation, rather than highlighting any difference in the ability, inclination and interests of boys and girls in schools. The Equal Opportunities Commission took pains to eradicate discrimination within the curriculum, by ensuring that all students would have access to the same curriculum, and even notes that procedures for

assessment would have to take into account in order to provide equal access for all. The EOC recognised that there were:

> established differences in test performance between boys and girls throughout the ages of 7-16 and across different areas of the curriculum. Differences in performance at various ages have been shown in language, mathematics, science, and verbal and non-verbal reasoning. However, various aspects of test design have differential effects on girls' and boys' performance. The use of practical tests, the form of questions adopted (e.g. multiple choice versus essay questions) and the context and content of individual test items have all been shown to affect the relative performance of girls and boys.
>
> (Equal Opportunities Commission, 1989, p10)

By ensuring that the curriculum provided easy and equal access to both boys and girls, and by ensuring that assessment techniques demonstrate a sufficiently wide range of approaches, which would enable boys and girls to experience similar rates of achievement, it would appear that the EOC had covered every avenue. However, what happened next came as a surprise, and caused a flurry of thinking and writing to find possible explanations: girls began to outperform boys! Francis (2000) contends that this is not necessarily a new phenomenon, in that girls had been achieving 5 or more "O" levels in the 70s, but states that the subject choice of girls, whether these subjects had been chosen or were suggested, were: "traditionally feminine, non-academic subjects, such as domestic science and needlework" (p8), and therefore the relevance of girls' success at this point was not considered to

be significant. The issue of differing gender biased curricula is emphasised by Arnot, who notes:

> ...the dominant pattern of state education where women have been implicitly orientated, if not overtly prepared, for domesticity and men for the world of work.
>
> (Arnot, 2002, p58)

It was not until boys and girls were given access to an equal range of subjects that girls' achievements became noteworthy. After the removal of the barriers to girls' education, and the introduction of an equal curriculum we can begin to make valid comparisons as to the achievement of boys and girls.

At first, girls began to excel in KS1 and 2, in the primary phase of education. The introduction of formal testing at ages 7 and 11 confirmed that girls were beginning to slide ahead of boys. This was shortly followed by improvements in girls' performance in the KS3 tests, at age 14, and then later at GCSE. It seemed that as the National Curriculum rolled out, so did the improvement in girls' achievement at all levels of formal testing in schools. However, this success was not limited to the National Curriculum in England and Wales. Across the world, educators were reporting that girls were beginning to outperform boys, and educational researchers began to probe for reasons why this phenomenon was happening.

> A common theme arising from the interviews was the belief that boys were underachieving and that their underachievement was not

> located in their behaviour, but in a variety of deficits within the educational system.
>
> (Davison, Lowell, Frank, & Vibert, 2004, p51)

This comment was made in the context of the Canadian education system, but applies equally to that of the UK. Rather than merely accepting that boys' underachievement was due to their perceived poor behaviour within the classroom, Davison et al. (2004) point out that other factors must be considered, such as the paucity of male teachers, and a curriculum, which focuses on literary challenges that do not harness the boys' imagination. However, the key here is that neither group has begun to consider that boys and girls may just simply learn differently.

One school in Essex took the unusual step of teaching boys and girls separately, while maintaining a co-educational school. There are, however, varying views on the efficacy of teaching boys and girls in separate classes. In one case, it was stated that:

> Both boys and girls said they felt they could be more open in class. They were not so concerned about what the others were thinking or saying about them.
>
> (Swann, 1998, p166)

Whereas a counter-argument suggests that:

> The emphasis on academic performance as a reason for separating boys and girls has two drawbacks. Firstly it ignores recent research on the importance of 'emotional intelligence' and how the

> development of the whole person contributes to cognitive development. Secondly, it undervalues improving relationships and maturity as educational aims.
>
> (Matthews, 1998, p173)

Although Swann's context was related to single sex teaching throughout her school, Chambers (2005) reports on a similar practice which was carried out specifically in a Modern Foreign Languages department, but not throughout the school. Chambers reports that, during this period of single sex teaching, pupils' confidence increased, particularly in oral skills, however the behaviour of boys deteriorated, as had been expected by the teachers of these groups. This may have been due to the mixed ability teaching which was necessary in order to accommodate single sex classes. However, Chambers also points out that the teachers of the single sex groups were not fully prepared for dealing with specific differences in the ways boys and girls learn, tending to treat them as homogeneous groups of boys and girls. As teachers, we do tend to have certain preconceived notions of girls and boys. These can be directed by something as simple as how work is presented (Clark, 1995) and these perceptions may indeed have an influence on students' achievement, as the relationship between teacher and student, and therefore the teacher's preconceived notions of the students' ability to perform in the classroom may well affect the students' achievement. When studying learners' perceptions of their successes and failures in foreign language learning, Williams et al. note the importance of the teacher:

> Some interesting variations emerge in relation to students' perceptions of the importance of teachers in their successes and

failures. A tenth of the attributions for doing well referred to the teacher, with a slightly lower proportion seeing teachers as a reason for failure. Girls tended to cite the teacher as a reason for doing well more than did boys, whereas boys were more inclined to blame poor teaching for their failures than were girls.

(Williams, Burden, Poulet, & Maun, 2004, p26)

A further aspect of the differences between boys' and girls' achievement in schools has been highlighted by the recent developments in understanding the brain itself. Scientists have shown that there are differences in the way the brain operates in males and females. These differences can be seen in abilities of both boys and girls to demonstrate skills in particular areas. Renato Sabbatini observes:

> One of the most interesting differences appear in the way men and women estimate time, judge speed of things, carry out mental calculations, orient in space and visualise objects in three dimensions, etc. In all these tasks, men and women are strikingly different, as they are too in the way their brains process language.
>
> (Sabbatini, 1997 n.p.)

Similarly, Arnot et al. (1998) point out the difference between boys' and girls' ability to perform in verbal reasoning and spatial awareness tests according to whether they are left or right handed. This would seem to imply that the formation of the brain, or biological circumstances do indeed have an influence on achievement in certain tasks in schools, however it seems that these differences cannot be clearly formed into patterns, as there were other factors, such as ability, to be taken into account.

Taking brain differences into account one might be tempted to abdicate responsibility for boys' educational achievement into the 'boys will be boys' camp. It would be easy to say that due to genetics, combined with evolution and justified by brain science, we should merely accept that boys, with their naturally advanced skills in spatial awareness, should be guided towards subjects like maths, science and technology, and steered away from subject areas where they have little or no natural inclination, such as English and French. However, to take this point of view is to negate the role of 'nurture', to deny society a part in the upbringing and educational achievement of boys, and to contribute to a stereotypical image of boys rather than viewing them as individuals.

It must be noted that there is also a distinction between nature and nurture, nature and culture and between biology and culture (Hearn & Morgan, 1995). The implications of these must be borne in mind when looking at all aspects of boys' educational achievement. The boys in question are not merely clones. but are each affected differently by their biology, their social traditions, their race and culture. Any understanding of gender issues in the context of boys' educational achievement must take these factors into account to avoid creating and studying a vain stereotype.

Taking into account the apparent evidence of falling standards in the achievement of boys in education, the ideas that there are differences in how the brain functions with regard to boys' and girls' achievement, coupled with the notion that 'boys will be boys', teachers have been encouraged to revise

and review teaching methods to remedy the situation. Following the publication of GCSE and A level results in August 2000, David Blunkett, the then Secretary of State for Education, and Estelle Morris, in her role as Schools Standards Minister could only suggest that strategies such as greater recruitment of male teachers, making it 'cool' to learn and addressing 'laddishness', as solutions to what they perceived as an increasing problem.

> As this year's GCSE results show that many boys are still underachieving, the education minister says there will be renewed efforts to understand and tackle the problem.
>
> As well as calling for research from inspectors on the impact of single-sex schools and classes, the minister has suggested that more male teachers could help develop a culture of learning among boys at an early age.
>
> "We want to see more male applicants becoming primary school teachers as boys benefit from positive role models," said the minister.
>
> (BBC News, 2000)

Despite this call for more male teachers, the same news channel in a volte face, reported 7 years later that: " More Sirs 'won't shut the gender gap'" (BBC News, 2007).

Regardless of the efforts made to address the imbalance between male and female teachers in the classroom, neither boys nor girls seem to believe that having a male or female teacher makes a difference (Younger et al., 2005). This is significant for two reasons – firstly it indicates that learners

themselves are developing an awareness of the mechanisms which assist or detract from learning, and secondly, in the case of my own research, the department in which I have conducted the research consists of two male and two female teachers. Although I had originally considered that this might have affected the results of the study, there is not room in this current research to investigate this matter further.

The culture of "laddishness" has, in recent years, come to be perceived as a major stumbling block to boys' achievement. Along with motivation, and sociological factors, "laddishness" appears to again excuse achievement in favour of "boys will be boys" as mentioned earlier. But the media does not give us a true picture. The simplistic analysis of exam results and a 'boy v girl' approach (Zyngier, 2009) does not begin to explain but rather blame both boys and girls for their respective success or failure, based not on what they have learned or on the learning opportunities to which they have had access, but based solely on the fact that they are male or female, boy or girl. At the same time as it became apparent that girls' were beginning to outperform boys on the even playing field of the National Curriculum, which made provision for equal access to an equal curriculum, specific strategies to promote the achievement of girls in subjects which had hitherto been seen as 'male' began to emerge. Girls had previously, whether through curriculum design or through personal choice, refrained from studying these 'male' subjects.

Projects such as WISE (Women in Science and Engineering), WIST (Women in Science and Technology) were prominent in secondary schools at the time of the introduction of the National Curriculum, with the aim of increasing the uptake of traditionally male subjects by girls, and promoting career choices which had previously been seen as available only to males. The ATHENA project was begun in 1999 with the aim of increasing the presence of women in Higher Education posts, particularly in relation to Science, Engineering and Technology. This project was initially funded to run for four years. With girls being actively encouraged to take up subjects which they had previously not considered, it must be asked, therefore, whether the boys have in fact fallen behind, or whether girls were beginning to achieve their potential in previously unchartered waters. It is also noteworthy that although these various schemes were introduced to enhance the prospects of girls in a new system of equal opportunities, but there seems to be an absence of similar projects aimed at developing the skills of boys in areas which had previously been perceived as the domain of the girls. As girls have traditionally achieved higher results in Modern Foreign Languages than boys, it may be worth considering introducing schemes to involve boys more in the learning of languages.

Concern about the perceived underachievement of boys in the current educational systems in the UK has been expressed by the Department for Children, Schools and Families (DCSF) in that a web site aimed at addressing the issues of the gender gap has been established (DCSF, 2009) It is interesting to note that there is a very clear bias in the site to improving

standards of boys to narrow the achievement gap between boys and girls, but no mention of possible strategies to help girls improve further. It is also noteworthy that this site focuses primarily on improving the reading and writing ability of boys in Key Stages 1 and 2, with little information offered to the older age ranges. The site has included, at various times, case studies, such as the Raising Boys Achievement Project, Ofsted Reports on Boys' Achievement, a Raising Boys' Achievement Toolkit, and a Boys' Reading List, as part of the "Boys into Books" initiative, providing funding for a list of books aimed specifically at boys, and currently incorporates a section reporting on "Ensuring the attainment of white working class boys in writing" (Appendix 2).

Despite the insistence on a curriculum that offers equal access to boys and girls, it is still argued that this curriculum continues to be geared towards boys rather than girls. Paechter (1998) argues that the school system maintains and perpetuates an inherent hegemony. She mentions the notion of "male domination of space and time" (Paechter, 1998) referring to boys' dominance through behavioural issues in the classroom. However she also refers to curriculum issues:

> In recent years there has been an increasing concern about girls' relationship to school science and, in particular, school physics, focussing on two issues: their generally poor performance relative to boys, and their reluctance to pursue scientific studies beyond the point at which they cease to become compulsory (Murphy and Elwood 1997). There seems to be a general perception that there is some degree of incompatibility between girls and school science, but

> the focus has been almost entirely upon the girls rather than the science (Manthorpe, 1989).
>
> (Paechter, 1998, p15)

According to Field (2000), the opposite could be said of MFL, where boys see the subject itself as being the root cause of their perceived difficulties, and so, boys relegate MFL to being a lower status subject.

However, Paechter had earlier pointed out that there are other issues to consider when researching gender:

> Such research, however, is predicated on the assumption that there are only two clearly distinguishable biological sexes.....There remain individuals who do not easily fit such criteria.
>
> (Paechter, 1998, p41)

This is a key point for any research into gender issues, whether in education or not – although there are visibly two biological sexes, when it comes to assessing the relative merits of these two in relation to thinking, learning or achievement, the lines of demarcation can become easily blurred. Although my focus is on gender differences within MFL learning, I must be aware that it will not be possible to clearly define male or female thinking patterns. Although physical differences in the anatomy of the brain have been shown to exist, these do not always translate into such clear cut differences in thinking and learning.

Indeed, Burke explores the issue of gender by differentiating between gender and sex in his research into gender identity, sex and school performance.

Burke noted the difference in school achievement between boys and girls with more masculine or feminine gender identities. He does not simply consider the outward appearance of what makes a boy or a girl, but considers the gender identity of the research subjects, indicating that: "people with particular role identities choose role behaviors which have meanings similar to the meanings of their identities" (Burke, 1989, p165).

The role identities themselves may be beyond the active choice of the subjects, however, the behaviours associated with them are not prescribed, but 'chosen'. This raises the question that if behaviours can be chosen, can they also be influenced by their environment? Burke concludes by commenting that: "Boys and girls may be subjected to these pressures and constraints to act in certain "socially acceptable" ways on the basis of their sex, but independent of their gender identities." (Burke, 1989, p167)

The more we try to clarify the meaning of gender, or gender identity, and the differences between this and sex of biological considerations, the more complex the issue becomes. McCarthy sums it up as follows:

> The intricate nature of gender results in large part from four realities that surround the phenomenon: (1) our lack of knowledge regarding the relative importance of biology or nature, versus culture or nurture, in the gendering of self, (2) the embeddedness of this basis of identity in other bases of identity such as race, class, or ethnicity, (3) the difficulty of gaining a critical distance from present gender arrangements, and (4) the dominance of power and power relations in advancing our knowledge of gender.

(McCarthy, 1999, p112)

That McCarthy was writing within the context of music education does not detract from the summary of the nature of gender here, as McCarthy has pointed out that "this tangible aspect of music culture can easily be grasped and related to other cultural roles and social hierarchies. At a deeper level, participation in music is participation in gender relations." (p116). The same could be said of learning a modern foreign language – the very nature of communication requires that it is related to other cultural roles and social hierarchies. My research deals with MFL learning in secondary schools. Having discussed the issues relating to gender within secondary schools, I will now move on to look at aspects of language learning within the school context. However, I will also combine these two strands to discuss later the relationships between gender and language.

2.2 Language

> The Babel fish... is small, yellow and leechlike, and probably the oddest thing in the Universe.....The practical upshot of all this is that if you stick a Babel fish in your ear you can instantly understand anything said to you in any form of language. The speech patterns you actually hear decode the brainwave matrix which has been fed into your mind by your Babel fish.
>
> (Adams, 1979, pp62-3)

The Babel fish, unfortunately, does not exist, and so it is necessary for a language to be learned. When trying to understand how languages are

learned, it is useful to consider the relative difficulties of learning different languages for the native English speaker, as determined by James in 1979:

Table 1 Relative difficulty of learning different languages for the native English speaker

	French	German	Spanish	Italian	Russian
Phonological	4	2	2	1	3
Grammatical	2	3	2	2	3
Lexical	1	2	1	1	4
Orthographic	1	1	1	1	4
Spelling	4	2	1	1	2
Global Distances	12	10	7	6	16

(James, 1979, pp19-22)

According to this table, it seems that French comes second only to Russian as the most difficult of the languages highlighted for students within the UK school system; and that the key differences, when compared to German, are evident in phonology and spelling. The sounds and letter combinations appear to present the greatest difficulty for learners, and yet French remains the preferred language of many students. However, if the lexical and orthographic elements of Russian were removed from the equation (due to the difficulties of using the Cyrillic alphabet), again French would be seen as the most difficult language to learn.

It must be remembered that in the school context in which I teach, a largely white school with very few students of other nationalities, which mirrors exactly the wider community, languages are not being learned for the purpose of genuine communication or migration to other countries. It is still a requirement of the National Curriculum to have exposure to a Modern

Foreign Language throughout KS3, and for that reason only, MFL is still a part of the school's curriculum. Students may have a preference for one language or another, for a variety of reasons, including parental experience and expectations, exposure in the primary schools, or even experience through travel or the status of the language. Entering secondary education, however, students do not always have a choice of which language they learn.

For the learner of MFL in the secondary school classroom, the relative difficulty or status of each language is not the main issue – the students have access to one foreign language only, and that is the one they must begin to learn. However, it is important to note students' perceptions of learning French, or another Modern Foreign Language, as part of the school curriculum. In her study on comparing attitudes and performance of Year 7 and 10 MFL students, Davies notes that as early as year 7 students, both boys and girls see learning French as one of the more difficult subjects on the curriculum.

> A large majority of boys and girls in Y7 rated French as a difficult subject in comparison with the rest of the curriculum, with an overwhelming figure of 81% for boys compared to 65% for girls. It would therefore seem to be the case that even high achievers in French find the subject hard as early as Year 7, and that boys in particular find French comparatively difficult.
>
> (Davies, 2004, p58)

Davies' study (2004), however, was concerned only with students who were exposed to French, so it is not possible to say whether there is any difference between the students' views of one language when compared with another.

Field (2000), also considered the position of students who had only been exposed to French. In contrast to Paechter who argued that in the case of science, it was the girls not the subject who were seen as the problem, if boys underachieve, it is the fault of the language, not the boys:

> Throughout this section, I have made the assumption that the major motivating forces are success and perceived usefulness. Boys' perceptions are that they do not enjoy the same level of success as girls and that they quickly see MFLs to be a subject of low value. Boys also do not respect French language and French culture, the most commonly taught MFL.
>
> (Field, 2000, p138)

However, when looking at the specific issue of boys' underachievement in the language classroom, Julé argues that external cultural concerns affect boys' perception of learning:

> Recent research seems to suggest that it is the boys who are underachieving. 'learning how to lose', in part due to a growing male culture which insists on a lack of interest in academic pursuits.
>
> (Julé, 2003, p22)

The change in the structure of the GCSE exam itself has been highlighted as a reason why boys are failing, with the syllabus becoming more "girl friendly"

(Callaghan, 1998). In the context of MFL, Callaghan has argued that the increased emphasis on the active speaking and listening skills of the GCSE, which have been traditionally favoured by boys, is no match for a syllabus which is largely girl friendly in its topic content.

The question we must begin to consider, in the absence of a Babelfish, is how language is learned, acquired, or assumed. To understand how second languages are learned, it is important to look at the arguments behind the issue of first language, or mother tongue learning. It may not seem to be immediately relevant to consider the issue of first language learning when researching foreign language learning in the context of the secondary school classroom. Students arrive equipped with a functioning mother tongue, and in the case of those participating in this research, they have little or no experience of languages or cultures other than their own. In an environment where monolingualism and monoculturalism are prevalent, both students and parents have only one experience of learning a language, and that is of learning their mother tongue.

Chomsky has suggested that there is an organ, which he refers to as a "faculty of language" (Chomsky, 2002), which is responsible for the development and evolution of language in humans. Research into aphasias has shown that certain regions of the brain (Broca's area and Wernicke's area) do indeed control specific language functions, particularly in relation to speech. Whether there is indeed an organ responsible for language production or whether language is as a result of sensory experience, as

demonstrated by John Locke's notion of the "tabula rasa", has been the subject of much debate among linguists. Jackendoff (1994) makes a case for language being innate. A child develops the skills to speak in whichever language is prevalent in their community. This learning, or acquisition, of language takes place subconsciously, with children demonstrating the skills to create new sentences without being taught the grammatical forms to do this. However, the idea of a biological section of the brain which contains a readymade instruction for developing grammar from birth, which Chomsky called the Universal Grammar, has opened debates for linguists concerned with second language acquisition. As my research centres on learners who are learning a foreign language within the secondary school context, it is important to consider these debates. Whereas it is plausible that the brain contains predetermined understanding of grammatical forms, the issue of learning a second language is affected, as Hawkins (2001) stated, by the following factors:

> The context in which second language acquisition (SLA) occurs differs from first language acquisition (FLA) along a number of dimensions:
>
> 1) In SLA another language is already present.
>
> 2) Other components of mind have already matured, whereas arguably FLA and the development of other cognitive capacities go hand in hand.
>
> 3) Input is usually encountered differently, and may involve written as well as spoken language.

(Hawkins, 2001, p345)

It could be argued that children who are brought up in a bi-lingual environment are exposed to both the first and second languages simultaneously, and therefore develop the grammars of both languages simultaneously, but Hawkins' remaining two points are significant for learning a foreign language in a secondary school. That students are already familiar with their own grammar can hinder progress in the second language, as students attempt to translate word for word familiar concepts into the second language. The third point is also significant. The input of the second language, particularly in the context of the secondary school classroom is very different from any form of first language acquisition. Learning a language from birth does not require a text book, with its structured process of covering topic by topic, with regular assessment opportunities, and pre-determined vocabulary.

Whether we use Universal Grammar or not, science has shown us that there are areas of the brain which have developed to focus on the organisation of language. The development of brain imaging techniques has demonstrated that certain areas of the brain do develop over time, and change in their ability to function at an optimum rate. The neuroscientist Pulvermüller demonstrates that results from neurophysiological and neuroimaging research can show that the typical language areas of the brain (Broca's and Wernicke's areas) are not the only loci of language action, but that various areas of the brain are involved in representing words. (Pulvermüller, 2002).

This does not necessarily mean that neuroscientists have discovered, with imaging techniques, that a language organ does exist:

> A closer look at the actual empirical data obtained so far, indicates that clear correlation between language phenomena and patterns of electrical activity are not easy to find. Recent studies of syntactic phenomena have great difficulty in proving that the physiological phenomena that are reported to co-occur with linguistic properties of sentences are strictly related to these linguistic properties per se. ... The instruments for monitoring brain activity do not by themselves tell the researcher what to look for when investigating linguistic representations and processes.
>
> (Pulvermüller, 2002, p273)

In 1967, Eric Lenneberg, a linguist and neurologist, proposed a hypothesis for a Critical Period of language development, and that at puberty, language development, if it had not already begun, would cease to function. Although Lenneberg was concerned with mother tongue language development, there may be some parallels here with foreign language acquisition. Lenneberg touched on the idea of foreign language learning, by noting that the period before the early teens and after the late teens present different challenges for children learning a foreign language:

> For the young adult, second-language learning is an academic exercise, and there is a vast variety in degree of proficiency. It rapidly becomes more and more difficult to overcome the accent and interfering influences of the mother tongue.
>
> (Lenneberg, 1969)

Lenneberg was a neurologist, and his aim was to consider the "operating principles of language because we hope that this will give us some clues about the operating principles of the human brain." (p640). As a teacher in a secondary school classroom, I am concerned more about the ability of students to learn, rather than the function of the brain, however, Lenneberg's study and observations may be of value to the timing, scheduling and relevance of learning a foreign language in the secondary school curriculum.

Due to advances in technology, it is now possible to use imaging to trace the development of language centres in the brain, as demonstrated in a study by Thompson who talks of the decline in the ability to learn a new language, and places this decline at age 12. This echoes a comment made by Lenneberg over thirty years earlier: "Neurological material strongly suggests that something happens in the brain during the early teens that changes the propensity for language acquisition."(Lenneberg, 1969, p639)
Thompson bases his view on the work carried out by a team of neuroscientists, who conducted a series of MRI scans on children from ages 3-15 in an effort to map the development of the brain during these years:

> Intriguingly, the age range where growth rates are markedly increased in linguistic regions of the callosum (6-13 years) also appears to be followed by a period where growth rates are drastically reduced (11-15 years). This temporal pattern may coincide with the ending of a well-known critical period for learning language, which has been consistently noted in studies of second-language acquisition, including sign-language, and in isolated children not exposed to language during early development. These studies have

shown that the ability to learn new languages declines rapidly after the age of 12, as does the ability to recover language function if linguistic areas in one brain hemisphere are surgically resected. Peak growth rates in linguistic regions of the callosum, as well as their attenuation around the age of puberty, may reflect the conclusion of critical period for the learning of language.

(Thompson & Giedd, 2000 n.p.)

Given that there appears to be a difference between the achievement of students who take their GCSE at age 15-16 and those who sit a GCSE paper at age 13-14, one possible reason for this could be the rapid decline of ability to learn new languages from age 12. However, interesting though this is, it does not explain the contrary view that older learners acquire a language more rapidly in the basic stages of language learning processes, but are overtaken by younger learners. Nor does the study report on any differences in the development of boys' and girls' brains, which may account for the differences in the achievements of gender at GCSE or the wider gender gap between those who study French and those who learn German. One must employ caution when viewing the results of Thompson et al.'s (2000) study in isolation – it would be too easy to view these findings as an excuse for a decline in language performance as students mature. The drastic reduction and rapid decline, as mentioned by Thompson et al. may provide Modern Language teachers with an excuse for the poor performance of their students, and may indeed provide evidence to support the earlier inclusion of MFL studies within the school curriculum, but the lack of information on the gender of subjects or on the languages learned do not, in my opinion,

provide sufficient evidence to draw conclusions as to the disparity between the achievements of boys and girls at GCSE, or for the difference between the rates of learning of either French or German.

The subject of critical period hypothesis has been further explored by Singleton and Lengyel (1995). Although Singleton and Lengyel deal with critical period hypothesis within the context of second language learning rather than foreign language acquisition, I think that the principles they discuss are relevant here. However, their mention of the Trinity College Dublin Modern Languages Research Project is relevant. In this project, English speaking learners of French were given a series of tests to determine their ability to complete C-Tests in French. Two groups of participants were chosen from a series of formal learners of French, but whereas one group was made up of participants who had started learning French at around age 12, the other was made up of students who had experienced an earlier start to their French learning, with some students having begun to learn French as early as 3 years of age. What Singleton and Lengyel demonstrate is that those who had begun to learn French at an earlier age scored more highly in lexical proficiency over those who had begun to learn at 12+. This contributes to the view that "younger=better in the long run". Krashen and colleagues (1979) make the distinction between the attainments of older and younger learners, by noting that although younger learners ultimately make greater strides in their overall attainment of second language fluency, older learners progress more quickly in terms of acquisition of the language. Although the majority of studies quoted by

Krashen deal with second language acquisition in the naturalistic context, he also makes reference to a series of studies which looked into whether older children could catch up on those who had experienced earlier exposure to a foreign language, and these studies were based in formal educational settings, rather than in the naturalistic setting. Krashen concludes that older children do indeed catch up to those who have had earlier exposure to the language.

The secondary school classroom is fraught with additional problems for the MFL learner: learners do not have a choice of language, or even a choice of how or what they are taught. Learners must adapt to outcomes which are prescribed by the National Curriculum or an exam syllabus, rather than learning a language for personal needs. They have no choice over what they learn, how they learn, or even when they learn it, often sandwiching snippets of French between other subjects, akin to Hawkins' idea of "gardening in a gale of English" (Hawkins, 1981)

In the case of my study, the similarity between performance and achievement of students aged 13-14 when compared with the achievement of students aged 15-16 cannot be attributed to the age at which learners began to be exposed to MFL learning in the classroom. Unlike Krashen, within the context of this research, I am concerned with students who are learning a foreign language in a classroom context rather than with the acquisition of a second language in a natural "immersion" environment. Again, where Krashen was concerned with success in language learning being demonstrated by successful communication, the aptitude I am testing

is more comparable to a language learning test, where specific abilities are measured. GCSE on the other hand, could be described as a test to determine the ability to pass a test – the factors involved in reaching nationally set standards at GCSE involve not only an understanding of the language, but also an understanding of the assessment requirements, and how the inclusion of certain types of structures (notably the use of a range of tenses) is required in order to achieve grade C or above.

2.3 Learning Styles

An understanding of the role of the language itself is necessary, however, it must be viewed in tandem with understanding not just *what* students learn, but *how* they experience learning in the classroom, and how different learning styles can affect achievement. The term "learning styles" grew from the field of psychology, and specifically from the study of group dynamics to include a range of aspects, including external factors such as personality traits, heredity, and environmental factors. Within education, however, we tend to use the term as being one which focuses on how learning takes place, as Ehrman et al. note:

> ... we more commonly reserve that term for preferred forms of brain activity associated with information acquisition and processing and consider personality variables to represent another kind of learning style.
>
> (Ehrman, Leaver, & Oxford, 2003)

For the purposes of this research I am concerned with information acquisition – how children learn. The relative difficulties of learning a language, and, indeed, which language to learn is worth further reading, however at this stage, it would be useful to explore learning styles in relation to learning languages, to discover whether the constructivist standpoint has any bearing here.

A developmental psychologist working in the field of cognitive studies in the early 1930s, Vygotsky opened the path for researchers of language in his study on the interrelation of thought and language. Vygotsky's work demonstrates particular significance for educators, as he emphasised the role of language in learning – with language being used by children, both internally and externally, as a tool for understanding the world around them. Vygotsky demonstrated that there are links between the study of a foreign language and the acquisition of scientific knowledge.

> However, while in the study of a foreign language attention centers on the exterior, phonetic, and physical aspects of verbal thought, in the development of scientific concepts it centers on semantics.
>
> (Vygotsky, 1986, p196)

Vygotsky's ideas have been discussed further in the study of views on symbol processing, computation and constructivism, opening the discussion as to whether learning comes from external or internal forces. It would be useful at this point to look at what is meant by these terms. Writing in the 1990's, from the perspective of the relationships between constructivist and socio-cultural perspectives on mathematical learning, Cobb (1994) explains

that: “students actively construct their mathematical ways of knowing as they strive to be effective by restoring coherence to the worlds of their personal experience”. (Cobb, 1994, p13)

What he is saying here, is that he sees a constructivist trend of learning as being one where the students see the usefulness of learning mathematics in their ability to sort things out for themselves – by finding and constructing rules, based on their own experience of the problem at hand. In other words, students enjoy being able to bring order into chaos. Cobb continues to state that:

> an individual’s mathematical activity is profoundly influenced by his or her participation in encompassing cultural practices such as completing worksheets in school, shopping in a supermarket, selling candy on the street, and packing crates in a dairy.
>
> (Cobb, 1994, p13)

Cobb’s position, therefore, requires a mixture of constructivism and socio-cultural influences in the learning processes. Vygotsky adds to this the need for an understanding of the mother tongue:

> Success in learning a foreign language is contingent on a certain degree of maturity in the native language. The child can transfer to the new language the system of meanings he already possesses in his own.
>
> (Vygotsky, 1986, p195)

At one level, this constructivist view of learning can be seen as a processing approach, however, a different view is expressed by Eric Bredo, who writes from the perspective of explaining the relevance of cognitivism, situated cognition and Deweyian pragmatism. When Bredo describes symbol processing, he makes it clear that the symbols, and therefore the learning, come not from within, but from without.

> In a symbol-processing approach, describing the world correctly is a matter of having the properties and relationships specified in a set of sentences match the properties and relationships present in the objects being described.
>
> (Bredo, 1999, p28)

The psychologist Jerome Bruner, also writing from a constructivist standpoint, also seems to promote the view that learning requires external sources. He defines the computational view as being concerned with information processing: “how finite, coded, unambiguous information about the world is inscribed, sorted, stored, collated, retrieved, and generally managed by a computational device” (Bruner, 1999, p148).

Bruner does not express the view that a computational style of teaching alone can influence the learning outcome, but that this has to work hand in hand with socio-cultural influences. After all, the symbols which are used to express a reality are ‘shared by members of a cultural community’ (p.149), giving access to an exchange of ideas.

But yet, these external forces, and the notion of transmitting new ideas do not necessarily apply in the situation of learning a foreign language, according to Vygotsky:

> The child does have the command of the grammar of his native tongue, long before he enters school, but it is unconscious, acquired in a purely structural way, like the phonetic composition of words. If you ask a young child to produce a combination of sounds for example *sk*, you'll find that its deliberate articulation is too hard for him; yet within a structure, as in the word Moscow, he pronounces the same sounds with ease. The same is true of grammar. The child will use the correct case returns within a sentence, but cannot decline or conjugate a word on request. He may not acquire new grammatical or syntactical forms in school, but, thanks to instructions on grammar and writing, he does become aware of what he is doing and learns to use the skills consciously.
>
> (Vygotsky, 1986, p184)

In this case, although the child already has access to the grammatical forms within his native language, it is the advanced grammatical and syntactical forms which need to be learned in school, and it is at the point of transmission of new information that the roles of the external forces may be considered.

2.4 Teaching Approaches

The consideration of external and internal forces, coupled with the earlier mention of the role of the teacher in learning leads into the theme of teaching approaches. Within the context of the secondary school classroom, many classroom teachers would like to think that there can be no learning without teaching. Whether we choose to refer to the teacher as a 'facilitator', 'guide', 'mentor', 'adviser', 'educator' or 'pedagogue', there is no doubting the importance of the role they play within the learning process, and the approaches they choose can directly influence the efficacy of learning in the classroom. Modern Foreign Languages are seen by some to rely more heavily on a teacher presence than some other subjects within the secondary school curriculum, due to the necessary influence of an 'expert' within the learning environment. For the purposes of this research, I have chosen to look at Inductive and Deductive teaching approaches and, with this in mind, it is useful to use the definition provided by Shaffer. In a study into inductive v deductive approaches, Shaffer carried out research into the relative effectiveness of each style of teaching. She defines her terms thus:

> First, an inductive approach is defined as one in which: 1) the students' attention is focused on the structure being learned; and 2) the students are required to formulate for themselves and then verbalize the underlying pattern. Controversy still surrounds the relationship of verbalization and concept formation. .... A deductive approach in this study is defined as one where, regardless of the timing relative to the practice part of the lesson, students are given an explanation.

(Shaffer, 1989, p396 Author's emphasis)

Much earlier, in 1945, when writing for an audience of Modern Language teachers, Rice gave a simpler view of induction, preferring to use the term to mean:

> It is the process of going from the known to the unknown and from the particular to the general. One of its basic psychological principles is that the pupil will gain most when he himself is most active in the acquisition of knowledge. Under the inductive approach, the teacher's function is less to "teach" than to help the pupils learn.
>
> (Rice, 1945, p465)

Like Shaffer, Rice's explanation still places the emphasis on the individual student's discovery of how things work, yet Rice does not compare induction with deduction – instead, he contrasts induction with traditional teaching, commenting on how difficult it will be for teachers to remain in the background to allow students to learn.

In 1975, Hammerly suggests that it is not a matter of choosing one or the other method of delivery, but that it is possible to combine both approaches – to explain while simultaneously allowing the learners to discover (Hammerly, 1975). Fischer returned to this theme four years later in his article: The Inductive/Deductive Controversy Re-visited, (Fischer, 1979). Fischer points out that both explanation and discovery can be hampered by the dissimilarity between native and foreign language structures. Rather than merely having to decide whether to use deductive or inductive teaching style, or indeed a

combination of both, Fischer comments that the matter is further complicated by deciding which structures should be delivered in either format. Fischer calls this the "learning transfer principle":

> This principle states that when the foreign language structural rule is similar to that of the native language, it should be presented in a setting in which the student may use his knowledge of his native language in order to understand and learn it.
>
> (Fischer, 1979, p100)

However, inductive and deductive approaches can be further refined, into what Decoo calls more complex and dynamic sub-categories:

> Modality A -- Actual deduction
>
> Modality B -- Conscious induction as guided discovery
>
> Modality C -- Induction leading to an explicit "summary of behaviour"
>
> Modality D -- Subconscious induction on structured material
>
> Modality E -- Subconscious induction on unstructured material
>
> (Decoo, 1996, p96)

It is important to consider the differences between actual deduction and conscious induction as guided discovery as mentioned above. As I have interpreted Decoo's ideas, the difference between these two closely bound notions comes about in the timing of the *eureka* moment of discovery. In actual deduction, learners work out how to solve a problem and then realise that they understand, whereas in conscious induction as guided discovery, the realisation of understanding comes when the learner has been gently

prodded in the direction of discovery. Both are important, as both allow the learner a sense of realisation, or discovery, but the differences lie in the amount of guidance given. In my research, I explored the effects of Modalities A and B on the participants, through analysing their responses to structured materials.

Although I am primarily concerned in this research with learning a particular grammatical structure, it is worth considering the theories of pragmatic learning here:

> Grammar relates to the accuracy of structure, including morphology and syntax, whereas pragmatics addresses language use and is concerned with the appropriateness of utterances given specific situations, speakers, and content.
>
> (Bardovi-Harlig & Dörnyei, 1998, p233)

The specific situations, speakers and content in a secondary school classroom may seem unrealistic to the learner, however Takimoto (2008) argues that it may be necessary "to teach language learners appropriate pragmatic realization patterns of speech acts in L2" (p369) .Takimoto is influenced by research conducted in the field of Applied Linguistics, and has conducted research among adult learners of English as an Additional Language. I feel that, although Takimoto's context was among adult learners with prior experience of learning English, his reference to 'learning with intention and awareness' applies equally in the secondary school MFL classroom.

Choosing to use a range of tasks involving oral components, Takimoto used deductive instruction, with clear explanations given, and inductive participation, where the participants were only required "to engage in the problem-solving task." Takimoto found that there was very little difference between the groups who had received deductive or inductive instruction, when they were tested immediately after receiving their instruction, however, in follow-up tests, the deductive learners did not fare so well in follow up tests, which Takimoto attributes to the difference between being provided with information and having to personally discover it.

Having assessed the various views on the deductive/inductive controversy, it is interesting to refer back to Shaffer's research to see whether any conclusions can be drawn as to the efficacy of one method over another. Shaffer concluded from her research, that the inductive instruction has a greater role to play in the learning processes than had previously been assumed. In her experience, Shaffer seems to think that the inductive approach had been limited to higher ability classes; however, she maintains that if enough patterns are presented, then the weaker students will have the ability to work out, in terms which they, themselves, can understand, how to reproduce a sentence containing particular forms.

Erlam (2003) extends on this idea by researching how a particular grammatical form can be understood and reproduced by a group of students who have been taught in only an inductive or deductive style. In her research, Erlam taught students how to use Direct Object Pronouns in

French, but ensured that each group of students received only one form of instruction: either deductive, where they were presented with rules, and given tables showing how to use them; or inductive, where the students were presented with a series of examples showing Direct Object Pronouns in use, and were expected to describe, in their own words, why each example was correct or incorrect. Her conclusions showed that the deductive approach led to a improved learning among her students.

In both Shaffer's and Erlam's research, the role of grammatical instruction played a part in assessing the effectiveness of the two classroom approaches. There are times when teachers tend to feel that using grammatical drills, or rote learning is the only way to achieve success. Morgan's suggestions for the teaching of nouns, (Morgan, 1942), despite being written some time ago, and Chew's discussion of the application of grammar in her article describing learning the gender of German nouns (Chew, 1989), both concentrate on the need to learn, to know, or to recognise, in this case, the gender of German nouns. Chew, however, comments that she finds "rule application too limiting to inspire student confidence". Whether it is due to confidence or not, Terrel also suggests that the knowledge and application of rules does not necessarily help the learner to create novel sentences:

> Strong evidence exists that the ability to demonstrate grammatical knowledge on a discrete-point grammar exam does not guarantee the ability to use that knowledge in ordinary conversation, be it spontaneous or monitored.

(Terrell, 1991, p54)

Terrel, who has also focussed on the use of grammar instruction, illustrated this point by reporting his earlier research concerning the use of the subjunctive in Spanish, where students who had focussed on learning the subjunctive, and had completed grammar drills to a required standard, were not able to use the subjunctive correctly in a communicative form.

It is precisely the difference between knowing and applying a grammatical form which concerns many language teachers. We can know that certain verbs in Latin require accusative and future infinitive, but using them in context is another matter. Lewis makes the same comment when comparing approaches to teaching style – she states that using an inductive style is preferable to grammar-translation method, but highlights again the issue that students are not necessarily equipped to create new sentences and use the patterns productively in new situations (Lewis, 1972). The ability to communicate in a meaningful way is the goal of the language learner and this necessitates the ability to create novel sentences which are appropriate to the situation.

> The fundamental observation of transformation grammar is that the native or fluent speaker is able to produce and understand an unlimited number of novel sentences in his language - sentences with which he has had no previous linguistic experience.
>
> (Koekkoek, 1970, p84)

In the case of my research, students are required to produce novel sentences of which they have had no previous experience, but are limited to

sentences which can produce the meanings as required by the National Curriculum or GCSE syllabus. The GCSE syllabus includes a word list, from which vocabulary in the examination must be drawn. In preparing for a GCSE exam, the students must therefore be prepared for two aspects of transformational grammar – that of being able to produce an unlimited number of novel sentences, but also being able to produce novel sentences that meet the content requirements of the exam.

Herron and Tomasello (1992) had come to the conclusion that the deductive approach may be more effective , but extend the argument by including research into Guided Induction.

> The presumption is that the students are forming a hypothesis about the underlying regularity involved throughout the oral activity and thus discovering by themselves how a particular grammatical pattern works, with only indirect guidance from the teacher.
>
> (Herron & Tomasello, 1992, p709)

The key here is that the students are "discovering by themselves" rather than having the rules presented to them, and replicating sentences based on that rule. It is argued that this approach has demonstrated greater perceived success for the learner in that the ability to hypothesise and receive immediate oral feedback provides the learner with a more concrete understanding, rather than presenting a rule and encouraging students to work from there. However, understanding the rule may be problematic where the learner has limited knowledge of rule construction in their first language.

In an earlier article, Fischer (1979) presents the issue of whether prior

knowledge, or indeed, the application of prior knowledge, can have a bearing on how rules can be used.

> When the foreign language rule is dissimilar to that of the native language, two possibilities occur. If the rule is simpler in some respect, it should still be presented in a setting in which the student may use his knowledge of the native language. Using the native language structure to perceive how the rule is simpler facilitates its acquisition. If the foreign language rule is of equal or greater complexity than the native language rule, it should be presented in a setting in which the student is prevented from using his knowledge of the native language, since the native language rule will be of little help, and, in fact, can be an obstacle in his attempt to understand the foreign language rule.
>
> (Fischer, 1979, p100)

The role of prior knowledge is not limited to that of grammatical understanding. Bügel and Buunk (1996), in a paper dealing with gender differences within the Dutch school system, examine the role of external forces at length, as the authors set out to determine whether prior knowledge, or societal knowledge has a bearing on how boys and girls score in foreign language assessments – in this case, specifically in learning English. Here, boys were outperforming girls, despite being given a range of texts, covering factual and fictional information. This was unexpected, as the report mentions that girls tended to perform as well, or better than boys generally in the earlier school years, and especially in subjects which required communication. The research was carried out among final year

students in Dutch schools, where the foreign language assessment consists of multiple choice questions relating to a series of comprehension tasks. The subjects of the research were all drawn from a single ability grouping, at the lower half of the ability range. The subjects undertook comprehension tests which were similar in style to the national tests, and which contained inherent bias towards male or female interests, with one topic of neutral interest used as a control.

The study shows that in this case, girls had a better understanding of texts with a female bias, and boy performed better on those with a male bias, leading Bügel and Buunk to conclude that:

> a significant sex difference in the neutral text was found for all subjects together, which seems to suggest that males generally had a higher text comprehension level than females.
>
> (Bügel & Buunk, 1996, p21)

My natural inclination is to question whether this higher text comprehension level was related to the structure of the test (multiple choice questions) rather than only the content. If the subjects were asked to summarise the texts, or to demonstrate their understanding of the texts through direct questions, I wonder whether the results would have been the same. However, the paper demonstrates the need to select appropriate material to ensure students have equal access to a curriculum.

A further study, which focuses closely on the opinions of learners themselves, was carried out by Jones and Jones in 2001. This study

assesses in particular the views of learners and specifically of boys on the perceptions of MFL learning within the context of English secondary schools. The study questioned students in a range of schools, whose GCSE results coincided with national trends regarding the ratio between boy/girl performance, but also in schools where this trend did not meet national expectations. For the purposes of the study, research into students attitudes towards French rather than German were carried out, due to the predominance of French within the sample schools. The reasons given for this relate to national trends in GCSE, which show a narrower gap in the results of boys and girls in German than in French, due, according to the authors, to German being studied by more able learners as a second foreign language. This will make an interesting comparison with learners within my own sample, where French and German are taught equally to a range of students with equal ability levels, and usually with no prior knowledge of foreign language acquisition.

Whereas the Dutch study had recognised the external force of prior knowledge as a factor affecting achievement in MFL learning, in this study, Jones and Jones identify dependence on the teacher as being a significant indicator of student' perceptions of success.

> Boys see a lack of real content in MFL: as an object of study it is 'all words and no substance'. This contrasts with other curriculum areas where teachers can allow pupils to reach their own understandings in an exploratory way by using English as a means of communication.
>
> (Jones & Jones, 2001, p17)

The coded nature of the language leads to a dependence on the teacher to provide answers, rather than allowing students to discover the solutions themselves.

Again, we see here an external force as being a key factor in the acquisition of language, with the perception that the role of the teacher is instrumental in success or failure. One of the key findings in this study is that: "Because the pedagogy of MFL is so teacher-centred, boys who are underperforming tend to see the teacher as responsible for the difficulties they have in their learning." (Jones & Jones, 2001, p47)

If, as Gurian et al. suggest, boys prefer to work things out for themselves:

> Whether it is language from sports trivia, the law or the military, boys tend to work out codes among themselves and within their own cognating process, and rely on coded language to communicate.
>
> (Gurian, Henley, & Trueman, 2001, p46)

then the dependence on the teacher for the key to unlock the coded language may indeed prove unhelpful in language learning, and brings us back to the argument for including more guided induction in language lessons. The same point was made in a study looking specifically at boys' performance in MFL (Jones & Jones, 2001):

> More able boys usually want to know how the language works and are not easily satisfied by learning set-piece phrases, especially in relation to topics which they are not interested in. (p41)

Within the context of the secondary school, both French and German lend themselves to a phrase learning approach, and this method of delivery is favoured by many teachers as well as the authors of the wide range of text books available to schools. Boys may prefer a more logical approach to language learning, and so it will become necessary in this research to investigate further whether there are differences in boys' performance when they are presented with the mechanics of language, and the tools to work out how a particular structure works.

By choosing the subtitle 'Listening to Learners' Jones and Jones provide a useful avenue for identifying and collating the views of learners in secondary schools, and offer a range of strategies for the future, I feel that the next logical step would be to discover not merely what learners think, but why they learn in different ways, and whether the curriculum itself should adapt to reflect the varying needs of students. Although there is not room in this research to investigate the matter of curriculum adaptation further, it would be of benefit in the future, to assess whether a change in the curriculum may enhance the learning experience of boys in secondary schools.

As outlined below, work has been carried out into aspects of gender differences in learning and learning styles, and I feel that it is an investigation of these aspects which must now be considered.

2.5 Gender Differences in Classrooms

Severiens and ten Dam (1994) begin their discussion on Gender Differences in Learning Styles by recognising that the differences in the educational achievements of males and females have a direct effect on their future job prospects: Gender inequality in educational choices and careers appears to be partially due to the way students learn (Severiens & ten Dam, 1994).

In the case of my own research, the students participating in the research do not have a choice over whether they study French or German, and are equally divided, by gender and by ability into both language learning groups. The way these students learn does not affect their choice of language, but may indeed affect how they handle learning situations within the classroom.

> In all these different settings, men were more often interested in the courses for the qualifications they offer. Women on the other hand, are more often interested in learning for learning's sake.
>
> (Severiens & ten Dam, 1994, p498)

It could be, therefore, that the different motivations of students affect the way they learn. In the case of students in my study, it appears that the students' motivation is to achieve a GCSE. However, to test this theory, it may be worth conducting a survey amongst students to determine what their motivation for study is, and to use this information to determine whether a difference in perceived purpose for learning affects the outcome of the learning. Graham (2006) comments on the differences of performance and mastery goals – where the primary purpose of learning a language is to achieve a goal, in this case, to achieve a GCSE, the learning is affected,

becoming shallow and superficial, whereas where the aim is to achieve mastery, the learner takes greater care to understand the language. The secondary school classroom in this day and age is burdened by a constant requirement to meet targets. League Tables abound. One could be forgiven for re-defining the role of classroom teacher to that of 'target achiever'. The prime purpose of learning a modern foreign language appears to have become one of needing to achieve X number of GCSEs, rather than a desire to communicate in another language.

The notion of success and its correlation with motivation has been the subject of much study. As well as their views of the relative usefulness of learning a language, students' perceptions of the language itself play a part in motivation to learn. Williams et al. (2002) discuss the differences in students' preferences for learning French and German, and conclude that students in their survey had a more positive perception of learning German than of learning French:

> Students exhibited a stronger liking and desire for German, a more positive attitude towards their teachers, a stronger sense of parental support, and a more cohesive group feeling. Those studying German also rated more highly their personal ability and success, perceived themselves as obtaining more positive results of their efforts, and showed a greater awareness of why they did well or badly and what they needed to do to improve, as well as perceiving a higher use of metacognitive strategies. The perceptions of use of metacognitive strategies for learning French were particularly low.

(Williams et al., 2002, p. 520)

However, what is not clear from this report is whether the students have experience of just one or both languages. In the 3 schools surveyed, a choice of French of German is offered in year 7, with a second foreign language being offered in either year 8 or 9. The students' perception of success in learning one language may indeed affect, either positively or negatively, their success in learning another.

In a research paper dealing with different learning strategies employed by male and females students in the context of ESL learning, Green and Oxford (1995) highlight 14 strategies which are used more frequently by women, compared with only one which is used more frequently by men, however this greater number of strategies used by female students did not necessarily reflect in greater proficiency of language use.

> Male-female differences in language learning strategies do not necessarily mean that people of one gender are more successful at language learning than people of the other. In the current study, variation by gender and variation by proficiency appear to be working in very different and probably unrelated ways.
>
> (Green & Oxford, 1995, p290)

Although Green and Oxford were conducting research into older students, and indeed into students of ESL rather than MFL, their work highlights the importance of needing to identify the relevance of different strategies used by students in the secondary school.

2.6 Assessment

When conducting research of the nature required for this study, it becomes necessary to conduct a range of assessments of the participants' rate of achievement in tasks. In this section, I shall indicate some of the arguments put forward to highlight the issues concerned in assessment

Assessing aptitude is one form of assessment, and one which does not look at achievement, but concentrates on ability, of a more innate nature, as discussed earlier in the Literature Review. As I have chosen to use the term 'aptitude' to refer to a particular talent or skill that can be displayed by learners, it may seem difficult to determine how, or indeed, whether, this can be assessed, particularly as the participants in this research had already been learning an MFL for 18 months by the time they began to participate in the research. If aptitude demonstrates an ability which exists outside that which has been taught, then it could be argued that it is inappropriate to use the MLAT-E at any time, however, Robinson (2005) gives arguments for using aptitude tests "from scratch and during instructed exposure". The MLAT-E is conducted in English. A knowledge of English is required in order to be able to read the test questions. However, the aptitude being tested here is the participant's ability to determine or identify patterns within the test questions. The aptitude under question, is the participant's aptitude when it comes to recognising patterns.

Summative assessment focuses on achievement, and is often used as the main measure of success in schools, whether by indicating National Curriculum levels, GCSE standards, or a range of other outcomes which are relevant to learning. Summative assessment as used in schools, tests the students' ability to cope with specific tests in specific conditions, and question types, for which the student can be prepared and coached – but it does not allow the student to demonstrate an individual rate of progress, or to express an individual sense of achievement, as it imposes outside controls. It could therefore be said that, that due to internal and external pressures, much of the teaching and learning in schools revolves around the need to pass tests, and therefore the need to teach rigidly following a syllabus, As teachers, we would like to believe that education is for the purpose of learning. Despite Freire's (1972) sentiment of the engagement between student and teacher in a joint discussion of educational needs, the reality of many secondary school classrooms is that education occurs merely to pass tests.

Davies (2004) outlines the rationale behind the need for a code of ethics in language testing. Reed and Stansfield (2004) discuss the ethical considerations of using a Modern Languages Aptitude test as a measure of language disability – whereas in my research I will not use this test as a measure of predicting language aptitude, but as a baseline measure, the ethical considerations on the potential uses of this test, as highlighted in this article are of importance. However, even the use of this test as a measure of language aptitude has its opponents. It has been suggested that the test

itself was designed for use in an audio-visual rather than a communicative learning environment and that its links to psychometric testing may jeopardise the validity of the test for language prediction purposes (Ehrman, 1994). This criticism was made as early as 1937 by Matheus (1937) when investigating efficiency within foreign language courses. Matheus demonstrated that there was a positive correlation between psychological test scores, language aptitude tests and semester grades among first year students in an American college. This research was, however, conducted before the MLAT had been developed, and since then a variety of tests have been introduced to understand more fully language aptitude. A further point, which again was made before the range of aptitude tests was introduced in their current formats, was raised by Kaulfers (1930), when he asks: 'why prognose in the Foreign Language?' It seems that little has changed since Kaulfers raised this question:

> Current Practice in the foreign languages seems to be governed by two fundamental a priori conclusions: the first, that the foreign languages are intrinsically too difficult for students of mediocre ability to pursue with success; the second that linguistic achievement is ultimately a matter of "language talent" or "linguistic aptitude"
>
> (Kaulfers, 1930, p296)

In many respects, Kaulfers comments apply equally today, as we have experienced the removal of learning a MFL from the core curriculum in secondary schools, and GCSE results show that it appears to be more difficult to achieve higher grades in German and French than other subjects (Coe, 2008). Given that it appears that it is more difficult to learn languages

than to learn other subjects, it does seem appropriate, therefore, in my research to use an aptitude test, not as a predictor of success, but merely as a starting point, to see whether there is, indeed, any difference between the point where boys and girls are at a given time, in a given language before researching further the differences between how boys' and girls' respond to different teaching strategies.

2.7 Summary and reflections

Having read a range of relevant literature dealing with various aspects of my research, it is interesting to note my own reactions to it. I have read material which has explained, guided and informed my research, but also other material which has led me to an understanding of the practical implications. On the one hand, there are factual texts, such as statutory guidance, or articles exploring neuroscientific experiments. But on the other, I have been able to empathise with my peers by exploring the experiences of other teachers, such as those involved in the practice of inductive and deductive teaching approaches in the classroom. Both have their place in informing my own research, and I feel that it is necessary to marry advice and guidance with practical examples with which other teachers can identify from their own experience in a classroom.

The literature on gender has informed my understanding of the increasing subtlety of issues which can arise in developing a curriculum. Gender identity may not be as simple a concept as is presented in schools, and the term will no doubt evolve further. The literature on language as led me to consider a wide range of aspects and arguments – considering how language relates to

the wider community, especially in the light of my own school which is unusual in being predominately mono-lingual and mono-cultural. In view of this, the literature on language has also led me to consider the role of motivation in language learning – where does MFL fit into a homogeneous culture? The literature on age, or critical phase has assisted in my understanding of the current issues, especially as they relate to the rising trend in secondary schools to enter students for GCSE at the end of KS3 rather than KS4. The literature is mainly from a theoretical perspective, with data collection or observation of students leading researchers to varying conclusions. Only two studies actively engaged students within the research by using practical classroom based examples of inductive and deductive teaching strategies (Shaffer, 1989, Erlam, 2003). However, what my research adds is a comparison between two different styles and two different languages, as well as providing base-line information on language knowledge through the use of the MLAT-E and related specifically developed test before the observation phase.

Where I have benefitted most in this research was from the practical examples of teaching and learning styles as demonstrated in the research into inductive and deductive teaching approaches. Here, I was able to consider how real teachers dealt with real situations, and bring their experiences into my own classroom. My own students then shared in the experiment, and shared their experiences with me, as they were given the opportunity, through my research, to explore, explain and understand what made their learning more effective, and how different teaching approaches affected, positively or negatively, their relative progress.

Before reading literature about assessment, I came from a perspective, as many teachers do, that the purpose of assessment is to measure what a student has learned. However, assessment may or may not be able to tell me whether a student has learned something, but is more likely to tell me whether that student is able to meet certain predetermined criteria, set by external bodies. There are, of course, different methods for assessing students progress, which can be used in formal educational settings or in more informal settings. For my research, two particular tests have proved to be useful – the aptitude test, which uses a format not used widely in the UK, and the summative test, with which my students will be more familiar in their every day school life. In my survey of the literature, I was not able to find any language test which would enable me to assess knowledge of specific language aptitude at a specific point, rather than as a predictive tool and so I developed one which would be fit for the purpose of this research and would be of further use in the secondary school classroom.

In the light of the definitions, the guidance, the examples of research which is similar, yet different, it would be useful at this point to focus again on my research questions:

- Do boys and girls display different aptitudes when learning a Modern Foreign Language?
- Does a difference in teaching style affect learning in a secondary school context, either when comparing boys and girls, or when comparing the learning of German or French in similar contexts?

3 Research Methodology

The methodological approaches I have adopted for this research involve a range of different elements, with an emphasis on observing, describing and analysing practices, employing an enlightenment model. "Educational research aims critically to inform educational judgements and decisions in order to improve action" (Bassey, 2007) I began my research as a teacher with a series of burning questions, which came from my experience in the classroom. I had noticed that in my MFL classroom, boys and girls responded differently to different aspects of what they were required to learn, and therefore experienced different results. GCSE results showed that there was a widening gap between the performance of boys and girls, and, although there was no corresponding data for KS3 testing, it seemed to me that there was a difference in the National Curriculum level achieved by boys and girls in KS3. The obvious question therefore, was: why? I therefore became involved in Action Research, as I began to research my own practice within the classroom (Kemmis, 1988). My research is aimed primarily at providing information for practitioners or colleagues, including myself, who can then accept or reject the conclusions and suggestions given and thereby reflectively react to their current practice.

Since preparing my initial proposal, I have altered and refined the research methods, and have highlighted my rationale for these changes below.

Originally, I was concerned that my research should remain ethical and objective. I considered the importance of objectivity within all aspects of the

proposed research. Central to the researcher's role in this framework is the need to maintain a level of objectivity, and therefore the researcher needs to apply systematic methods which afford objectivity. At this point, the nature of objectivity in research needs to be clarified. As we read in Philips (1993):

> A person does not have to read very widely in the contemporary methodological or theoretical literature pertaining to research in the social sciences and related applied areas, such as education, in order to discover that objectivity is dead.
>
> (Phillips, 1993, p57)

This may seem a cynical view, when compared to Eisner's efforts to eliminate bias:

> Eliminating bias, remaining objective, and ensuring validity in my research requires an understanding of the nature of qualitative and quantitative research methods.
>
> (Eisner, 1993, p48)

It appears that whereas Phillips expresses doubts about the researcher's ability to remain objective, Eisner purports that it is with 'pains' that this objectivity is sought. If objectivity is seen to be 'truth', then both Phillips and Eisner have a point. We do indeed seek the truth, but that truth may be coloured by our own interpretation of what is or is not relevant to the object of the research. On the other hand, if objectivity is to be seen as an 'it', it is subject to the researcher's view.

Defining 'objective' in a philosophical sense, the OED describes the term as:

> Belonging not to the consciousness or the perceiving or thinking subject, but to what is presented to this, external to the mind, real.

Objectivity in this sense is seen to be an external notion, where information, ideas, data, opinions and other notions which we include in research, comes not from within the mind of the researcher, but from outside it. This definition relies on an ontology of the existence of an external, tangible, identifiable and objective truth and an epistemology of reality allowing us to access this objective truth. It cannot be influenced by the researcher, but exerts its own innate influence on the outcome of the research. This definition can work well if applied to research which investigates facts, like the percentage of people who choose to own dogs rather than cats. This is a straightforward issue as Schostak purports:

> To speak objectively implies the speaker is not subjectively colouring their words with feelings, prejudices, values. There is an aura of neutrality. Indeed objectivity is saturated with the authority of science and professionality, connoting a specialised way of doing things to arrive at the 'facts', a picture of 'reality' and of 'truth'.
>
> (Schostak, 2002, p63)

The researcher's individual preference of pet ownership cannot possibly influence the case under investigation, however, where the research investigates the processes of choosing a cat or a dog, or the processes of caring for the pet, the clarity of remaining objective may become blurred. Cohen et al. take this idea further:

Investigators adopting an objectivist (or positivist) approach to the social world and who treat it like the world of natural phenomena as being hard, real and external to the individual will choose from a range of traditional options – surveys, experiments, and the like. Others favouring a more subjectivist (or anti-positivist) approach and who view the social world as being of a much softer, personal and humanly created kind will select from a comparable range of recent and emerging techniques – accounts, participant observation and personal constructs, for example.

(Cohen, Manion, & Morrison, 2000, pp6-7)

They state that the world of research is made up of the hardened objectivists and the softer subjectivists. By saying this, Cohen et al. give clear labels to the schools of research as being 'hard' or 'soft', while at the same time, by talking about these styles in tandem, he is not saying that the subjectivist or anti-positivist approach is any less valid than the positivist style. This then raises the question of whether objectivity is absolutely necessary in research. Jayaratne and Stewart stated: "The greatest benefit of apparent objectivity lies in its power to change political opinion." (1995, p229).

This could be the reason we seek objectivity, using it as a pragmatic and epistemological tool to add weight and power to our findings. It may seem naïve to assume that the outcome of the research can only effect change if the object of the research can be seen to be clean and clinical, and without bias, however, the purpose of research is to allow changes to be made, and this cannot happen if the research is perceived to be tainted by the

subjective opinion of the researcher. In this way, objectivity and research seem intrinsically linked.

However, throughout all this process I am a both teacher and researcher. As a teacher, my role is to engage children in their learning. Children are neither clean nor clinical – they are living, breathing, feeling, thinking, unpredictable individuals. My experience in the classroom made me realise that I would have to move away from a strict positivist view of objectivity, while taking pains to produce outcomes that can still influence the practices of others.

Having considered what we mean by objectivity, it would be useful to compare and contrast the quantitative and qualitative methodologies, and the relative merits of each.

In recent years, there has been a rise in the use of qualitative methods of enquiry, and with this has arisen the debate of whether this style of research should replace or work in tandem with the more traditional styles of data collection and analysis known as quantitative research.

Quantitative approaches are used to describe current conditions, investigate relationships and study cause-effect phenomena. The assumption is that reality is measurable. Facts are presented with mathematical accuracy and the information is seen with the aura of scientific precision, lending authority to the adage that there is safety in numbers. For this reason, I employed quantitative measures to demonstrate whether there are any immediately visible differences between how boys and girls perform when learning an

MFL. I wanted to show that any differences between boys and girls could be seen, in a clear and logical format, that the numbers could be used to demonstrate what a reader might see as being "a picture of 'reality' and of 'truth'" (Shostak, 2002).

By contrast, qualitative research is seen to be fraught with variables, which can be freely interpreted and from which hypotheses can be developed rather than tested. As Hopkins states:

> Qualitative research is less of a methodology and more of a way of life! It is an approach that is applicable across a range of settings, describes and analyses phenomena on their own terms, and helps us to think constructively and to generate meaning out of complex and problematic situations. Consequently, it is also an approach that empowers individuals and increases feelings of efficacy.
>
> (Hopkins, 2002, p. 47)

At this point it would be useful to consider a small number of types of quantitative and qualitative methods.

The backbone of quantitative research is the broad sample questionnaire or survey. Both of these give access to a wide range of data, a broad spectrum of research subjects and a quantifiable selection of results. Due to the apparent scientific nature of the information gathering process, we are able to state categorically that nine out of ten cat owners prefer a particular brand. On first sight, this would appear to be the most objective of all sampling –

straight forward questions with straight forward answers, which can be collated and presented as scientific fact. However, in order to assess whether these methods can provide the relevant information, we need to look at the questions rather than the answers –

- Why have certain questions been asked?
- Who is asking them?
- What is the purpose in asking them?
- What outcome is expected?

In addition to this, we need to examine the size and nature of the sample group:

- Is it representative of the population under review?
- Is the sample large enough to give a broad view?

With this in mind, the idea of a clean and clinical questionnaire becomes less objective, but rather subject to the needs of the researcher, the organisation behind the research, and the participation of those whose views and opinions are under investigation. Quantitative data is subject to a range of variables – it is not a clean and sterile test-tube into which a range of answers can be stirred and mixed. Even test-tubes can affect results if they contain contaminated data, or if the data simply does not fit. Despite all these possible pitfalls, the use of the questionnaire does allow the researcher to carry out investigation in a way that is observable and replicable, which moves into the notion of 'reliability' of the research, in that the questions will always be the same and will be asked in comparable situations. The researcher can repeat the experiment in an open way with a wide range of subjects, thereby showing reliability of the experiment.

This kind of reliability can carry with it the weight of influence – in the case of quantitative research, the influence belongs to the researcher, whereas in qualitative research, influence is given to the research participants, through their ability to express their own views and demonstrate their processes, and ultimately their understanding. Whereas quantitative methods show proof, replicability and validity, qualitative allow all those involved to experience, empathise and become empowered. Rather than merely providing an explanation of the cause-effect phenomenon, qualitative methods allow those involved to understand (Hammersley, 2007). The researcher chooses an epistemological standpoint of objective distancing or subjective empathy. Most predominant among qualitative methods are the ethnographic and autobiographical approaches. These methods allow the "subject" of the research to give their own viewpoint unhindered by the bias of the researcher. To express the substantial input and investment of the "researched", researchers prefer the term 'participant' rather than 'subject' in these contexts. The use of autobiography or diary keeping allows a participant to present in their own voice, at their own time and in their own style their own personal account of life. The reader of research accounts can accept or disregard the information presented according to their own opinion, in the same way as the evidence presented in an autobiographical account does not necessarily need to be externally validated as it presents the writer's own view of their situation.

A method which allows the researcher to guide their participants, but which retains the capacity for the participants to retain their own voice, and

therefore their own control of the views shared, is the in-depth interview. By guiding and listening to responses in an interview, the researcher actively collaborates with the participant and can gain a greater insight into the lives and positions of participants of research, and here too, the participants are able to present their own opinions. Rather than giving control of the research to the researcher through the answering of predetermined questions and collection of numerical data, a greater importance is placed on the role of the participant of that research – the data becomes a voice, the voice is heard, the opinions given guide the researcher to conclusions.

From a quantitative and positivist perspective, qualitative methods can be criticised for potential bias on the part of the interviewer (Cohen et al., 2000), small sample sizes and results which may be open to interpretation.

However, it is the reason for the research which can give qualitative enquiry its relevance. Qualitative research could be taken to mean a study of issues which affect society, for the purpose of charting societal development, recognising the part that historical developments have played and assessing the potential for the future development of the society. In short, what is, was and will be. By looking at issues in detail and without the clinical precision of quantification, does not mean that the research cannot potentially effect change.

As I mentioned earlier, methodology needs to fit both the purpose of the research and also the research questions. Quantitative enquiry lends itself to research into aptitude – there already exist tried and tested instruments, which have been proven to give consistent results. However, when it comes

to investigating teaching styles and listening to learners, this requires a more qualitative approach, with a mixture of instruments which are designed specifically for the purpose and which can evolve during the cyclical approach of Action Research (Kemmis, 1988).

3.1 Methods

Having looked at the relative merits of qualitative and quantitative methodologies, I have decided to employ a mixture of qualitative and quantitative methods.

Although Schostak (2002) sees the two as incompatible, I prefer to combine measurable quantified data with the qualification of description of processes. I aim to give a broader picture of the learning processes by not merely providing a statistical representation of learning styles and aptitudes, but also an observed focus of the views and opinions of a small group of learners.

For the purpose of this research, I am using the term 'assessment' to mean: the process of gathering and judging evidence in order to decide whether a person has achieved a standard or objective. In this case, it is not merely a case of whether the research participants have reached a standard or objective, but whether the standard or objective was fairly determined, and whether the tasks to be achieved are, indeed valid.

The research falls into two sections: whether boys and girls have different aptitudes for learning a modern foreign language in the secondary school,

and whether they learn in different ways. Before collating any kind of data on the students' ability to learn a language, it was necessary to investigate the available methods for determining aptitude in learning a foreign language.

3.2 Modern Language Aptitude tests

In order to ascertain whether there was any difference between boys and girls in MFL, I decided to take a snapshot of what they were able to demonstrate at a given point. For this purpose, I used a Modern Language Aptitude test. I chose this style of test merely as a tool to indicate what the students were able to demonstrate on that one day, rather than as a tool to predict their potential progress throughout their studies. Students are familiar with the format of aptitude tests, through their involvement in CATs (Cognitive Ability Test) testing, and I felt it was important that they felt comfortable with the format and the layout of the test, in order to concentrate on the tasks contained within it.

There are two widely used Modern Language Aptitude tests, both of which have been in use for over 40 years throughout North America.

Modern Language Aptitude test (Carroll-Sapon)

The MLAT incorporates four components of language aptitude as identified by Carroll and Sapon:

phonetic coding - the ability to code and remember an auditory

phonetic signal

grammar handling - the ability to recognize functions of words in sentences

rote memorization - the ability to recall foreign-language items

inductive language learning ability

(Carroll & Sapon, 2002)

The test was originally designed for adults, but was further developed in the 1960s to assess the aptitude of younger students via the MLAT-E (E – for Elementary schools, grades 3 – 6, which roughly equates with school years 4-7 in the school system in England and Wales). At this time, there was interest in Foreign Language Teaching in American Elementary schools, which led to the development of a test aimed at this age bracket. The test in its original form is "far from a magic bullet slaying the problems of language prognosis" (Dunkel, 1960), however, it does have merits in giving an initial assessment of aptitude for the purposes of this study, and that initial assessment can show how boys and girls recognise and manipulate patterns in language, rather than using it as a means of predicting future achievement in language learning.

PLAB (Pimsleur Language Assessment Battery)

A further form of language testing is the Pimsleur Assessment Battery. These tests are intended for older students, and as such are not appropriate for the KS3 students involved in my research at this stage. An interesting aspect of the PLAB is the assessment of MFL aptitude and its correlation to other academic subjects (linked with the GPA in the US system).

In the school year 1965-6, Pimsleur (1969) conducted a battery of tests among a range of students who had begun learning German. His research participants were taken from 9th Grade, which is the equivalent of Year 10 in schools in England and Wales. Pimsleur demonstrated that those students who had achieved a high score in the aptitude test also achieved a high score at the end of year assessments in German, and those who had demonstrated lower aptitude achieved lower test scores in German. Pimsleur concludes from this, that it is indeed possible to demonstrate aptitude for foreign language learning.

A further similar version of the PLAB is the DLAB (Defense Language Aptitude Battery) which runs in tandem with the VORD[2]. Both of these tests are designed for adults, and therefore would not be appropriate for the age range with which I work. In addition to this, the DLAB and VORD are for use in US government establishments and are not widely available for general use (Robinson, 2005), whereas the MLAT-E was developed specifically for a younger age range, and has been used widely in SLA research. Therefore I decided to use the MLAT-E test, not as a predictor of future language achievement, but as an easily available tried and tested means of showing a snapshot of the students' current situation, in a format with which the students will be familiar and comfortable.

[2] VORD was the term used for "word" in the artificial language used in the test (Parry & Stansfield, 1990)

Problems to consider:

The aptitude test provides information only on linguistic aptitude, and not on other factors, such as general intelligence, motivation, the ability to use language in a non-language setting, or even the variables in the learning environment. However, Reed and Stansfield have argued that the test can also be used to determine 'language disability' (Reed & Stansfield, 2004). My concern in using the MLAT-E is not to identify learning disabilities, nor to assess the setting and streaming of students, but merely to provide an indication of whether the aptitude which participants display can vary by gender, and whether I have been able to include a broad spectrum of abilities within the research sample.

The MLAT-E results can be used to assess an individual student's performance in line with 'national norms', however, the norms are only valid for students within the US education system, and therefore cannot be assumed to be operate in a similar way in the UK, until sufficient quantitative data can be made available. Even then, there may not be a valid correlation between the MLAT scores and the forms of testing used in UK schools:

> It is not expected that the MLAT-E scores will predict the criterion measurements perfectly. For one thing the criterion measurements themselves may not be accurate measurements of achievement; instructors may vary in the degree to which they can accurately assess student performance. In addition, pupils are not always motivated to work to the limit of their abilities, and highly motivated pupils may overcome mediocre ability.

(Carroll & Sapon, 2002, pp6-7)

Currently in UK there are no KS2 or KS3 national norms, as SAT testing does not include MFL. For this reason, in my initial study, I conducted the test among a wider ability range of students, in order to begin to develop field data, however, it will be necessary to conduct this test annually with a fresh cohort of students to provide a broader range of test scores. In addition to this, tracking students' progress as they proceed towards GCSE will provide further data on student achievement, and whether there is any correlation between achievement and aptitude.

Similarly, the correlation between language aptitude scores and grades in MFL needs to be adapted to fall in line with National Curriculum levels and GCSE results.

The questions asked in the test also throw up potential problems for research participants within the UK education system. The questions are worded in US English, and the accompanying cassette is spoken by a speaker of US English. I have used the MLAT-E in its original form for this research, however there are many aspects of it which would need to be rewritten for further broader research in order to provide a more appropriate test for a UK audience.

I decided to carry out the MLAT-E test with a sample group of students. As I am concerned with the Fast Track students for this research, I felt it was appropriate to select students from the Fast Track classes as a suitable

sample. Initially I selected only the 2 Fast Track classes, involving a range of students learning either French or German. However, after completing the first round of tests, I was surprised by the results, and so extended the sample to include another two classes, again, one each from the French and German samples, in order to provide a broader spectrum of results. The initial round of tests allowed me to test not only the validity of the test itself, but also to look at practicalities, such as marking and administering the test. The potential language ability of the students in the sample group has already been the focus of much discussion and analysis within the MFL department, due to the selection for Fast Track classes. However, selection of these students was based solely on the students' performance in the KS2 SATs, which contained only assessment of ability in English, Maths and Science. By selecting students in the top 2 sets of both the French and German cohorts, I was able to determine whether the current selection method does indeed provide an accurate indicator of ability specifically when it comes to potential language learning. By selecting students from year 8 rather than year 7, I was able to compare the results of the MLAT-E with the teacher knowledge of the students, as the teachers concerned had worked with their groups for over a year by the time the MLAT-E was carried out, and were in a better position to comment in depth on the results of the test sample. In addition, having spent a year learning a language, other indicators of students' performance, such as exam results or other internal school assessments provided a detailed overview of students' progress, and showed whether or not the existing selection method for Fast Track (by KS2 SATs results) proved to be accurate.

Initially I had planned to research students' perception of the languages themselves, however, I now feel that the students may not have the equipment to comment in a meaningful way on the single language they are faced with learning, at this early stage in their language learning careers. Therefore I feel it would be more useful to question students' perception of the language learning, as they experience it, moving from language preferences to learning preferences within the context of the Modern Language classroom. Although my prime focus is KS3 Fast Track students, when dealing with the aspect of learning preferences, it is also useful to elicit the opinions of KS4 students, who have made an active choice to continue with language study, and indeed to widen the scope of the research by asking a wider range of students for their opinions on their preferred learning style by way of informal questioning in a group situation. By taking results from both Key Stages, I can able to ensure that the views expressed in the research are generalised and replicable within other comprehensive schools.

Having established what styles the students prefer in studying MFL, and their perceptions of the learning process, it became necessary to delve into the 'how' - how students learn, what processes they go through, and what they hope to achieve. In order to do this, I looked at smaller groups within the school, focussing on a specific grammatical point which is seen as a turning point in both KS3 and 4 – the use of tenses. Initially, with the year 8 students, I investigated how they learned a particular grammatical form. This gave me the opportunity to investigate through observation and discussion how

students formulate sentences – whether by learning and repeating set phrases or by working out how sentences can be constructed. I observed the students while they were undertaking a learning activity, and asked them to talk aloud, expressing their views and opinions on the process as it was actually happening.

Initially, I intended to use video as a means of recording the students at work, and then to code and analyse the data at a later date. However, in the school in which I am currently employed, it has been requested that video not be used, due to the sensitive issues of retaining images of students on tape, and the potential privacy issues that may occur. As a result, I therefore decided to observe students in small groups, as they worked through a task in their MFL. The observation focussed on how each student or group of students tackled the task, whether they made use of any resources, the length of time it took to complete the task, whether they completed the task individually or collaboratively and how they perceived their relative success. These sessions were audio taped and transcribed for further analysis.

Having seen the students at work, I conducted semi-structured interviews with a small sample of the students. Rather than using a structured interview with a rigid set of questions, I wanted to have the flexibility to explore new themes as they came up in conversation. It must be remembered that children are all individuals, and would not necessarily have the same perceptions of an activity which they have undertaken. By allowing flexibility in the semi-structured interview format, I had the opportunity to explore how

participants felt about the group tasks more effectively. It could be argued that by changing the questions, the research may not be replicable. However, it is important in the semi-structured interview to consider carefully the themes which must be addressed, and to remember that these themes will not change, just the way in which they are asked. This should hopefully avoid the "good subject phenomenon", where research participants give the answers they believe the researcher wants to hear. This is particularly important in the interviews, as the participants were first and foremost aware of my position as a teacher, with all that entails, and may have found it difficult to accept my new role in the interview as a researcher. The greater flexibility of the semi-structured interview could therefore reinforce the researcher role, by becoming more of a discussion than the question/answer format with which students are familiar.

Students were selected by simple random selection from classes of each language although an element of stratified sampling was present to ensure a representative range of ability and gender. These interviews were transcribed for later analysis. The interviews were guided, but the aim was to focus on listening to the students explain their own learning processes, including the steps they went through to learn or apply the new knowledge, and whether they felt they were successful in their learning.

3.3 Analysis

The analysis incorporated a mixture of qualitative and quantitative data. The results of the questionnaires on students' perceptions of their language learning provide a quantitative sample, reflecting the views of a broad range of students. These were later analysed by L2 (foreign language studied), by year group and by gender. Data gleaned from this study could be compared against the data sample from the MLAT-E test, which indicated trends in aptitude towards learning a modern foreign language, and existing data on student progress from a range of internal sources within the school. The qualitative data from student interviews and observations afforded the opportunity to highlight the students' own views on the processes of learning, and were differentiated again by L2, year group and gender. The qualitative data, once analysed, could then be presented in narrative form, using selected quotations from those under observation to provide an insight into the views they had expressed.

The analysis allowed me to compare and contrast the views expressed by students of both languages to ascertain whether learners employ different learning strategies according to the language they are acquiring. It was also important at this stage to relate evidence of student achievement to the equivalent NC levels and GCSE grades.

3.4 Anticipated problems

I anticipated that the question may be raised about whether there was any need for me to remain independent throughout the as some of the

participants were from my own classes. In addition to this, I was concerned that my colleagues would be apprehensive about being observed at work, and so I had to clarify my objectives with them in order to achieve access. Initially, I had intended to carry out research in a second school, in addition to my own, preferably one where classes were taught in a single sex setting, however, access to such a school became problematic in terms of finding a school which was able to allocate time within their own curriculum for such a study as well as the difficulties in being absent from teaching to visit a second school, and timetabling constraints would prohibit taking sufficient time to gain suitable access for the extended periods required. This does not, however, preclude such observations taking place at a later date, or for continued research into this field.

A further change to the Initial study involved the selection of classes to observe, although this change applied only to the Initial study and a full sample of classes was taken into account for the full research. Currently, there appears to be a narrower difference in achievement in GCSE results between boys and girls in German than in French (see GCSE results for 2004/5 and 2005/6 in Appendix 3). As I am researching gender differences in the way students learn as well as aptitude in learning a foreign language, it seemed appropriate, therefore, to focus the initial study on students who are learning German only. By selecting only classes who are learning German, I was therefore able to focus on the differences in the way students have learned a particular grammar point, without becoming too embroiled in the varying degrees of difficulty inherent in the two languages at this early stage. After an initial analysis in the initial study, the way would be made clear to

broaden the scope for the main research to incorporate students with a broad range of abilities as well as those who are exposed to learning both French and German.

4 Ethics

Before undertaking any kind of research, certain questions must be asked, namely, whether the research itself can be regarded as ethical. It would be useful at this point to define what we mean by the term "ethical" in the context of research.

The OED defines "ethics" as:

> The science of morals; the department of study concerned with the principles of human duty.

Therefore, in the context of research, ethics can be seen as the need to 'do the right thing', but, as the OED uses the term 'science of morals' it is also important to understand *why* we are doing the right thing, and *how* the principles of human duty can be met. Various organisations have taken pains to define more clearly what 'the right thing' is when it comes to research, and have identified a range of discrete areas of concern. The Social Research Association (SRA) have defined and listed the obligations of researchers as being to society, to funders and employers, to colleagues and to subjects.(Social Research Association, 2003). It is worth looking more closely at what the SRA mean by the obligation to society:

> If social research is to remain of benefit to society and the groups and individuals within it, then social researchers must conduct their work responsibly and in light of the moral and legal order of the society in which they practice. They have a responsibility to maintain high scientific standards in the methods employed in the collection and

analysis of data and the impartial assessment and dissemination of findings.

(Social Research Association, 2003, p13)

'The moral and legal order of society' gives a clear outline of the responsibility on the researcher, as they attempt to conduct research ethically. This leads neatly to the SRA's description of the obligation to the subject:

> Social researchers must strive to protect subjects from undue harm arising as a consequence of their participation in research. This requires that subjects' participation should be voluntary and as fully informed as possible and no group should be disadvantaged by routinely being excluded from consideration.
>
> (Social Research Association, 2003, p14)

These two obligations set out very clearly that the role of the researcher must remain within the moral and legal framework of the area in which they work, while simultaneously protecting the subjects from harm. They overlap with the Ethical Guidelines issued by the British Educational Research Association (BERA). Both sets of guidelines place great emphasis on the need to respect the participants, through such means as giving consent, and allowing withdrawal from the research. BERA goes further, in mentioning Articles 3 and 12 of the United Nations Convention on the Rights of the Child, which state that primary consideration must be given to the best interests of the child, and that children should be allowed to express their own views freely, and should be able to give their own consent. (BERA, 2004)

As a teacher, with a duty to care for children, these are questions which I have considered at every stage of this study – whether I have made sufficient effort to prevent harm, and whether my prime concern was for the interests of the children, as opposed to for the completion of the study. My first responsibility is as a teacher, and as such I am required to teach a curriculum as prescribed by the school. This has led me to question my position when conducting research within my current school – my role is to teach, so how can I guarantee that my students will benefit from taking part in the task? However, in addition to my teaching role, I am also charged with undertaking professional development, under the School Teachers' Pay and Conditions Document (STPCD):

> All teachers should have a professional responsibility to be engaged in effective, sustained and relevant professional development throughout their careers and all teachers should have a contractual entitlement to effective, sustained and relevant professional development throughout their careers.
>
> (DCSF, 2008, p11)

It could be argued that conducting research into aptitude, and 'experimenting' with different teaching styles may not form an intrinsic part of the curriculum, and therefore goes against my contractual obligation to teach. However, the information on aptitude can be used to inform further teaching – if, for example, the research concludes that one group or the other finds the identification of parts of speech (nouns, verbs, and the like) difficult, then the evidence from the research allows teachers to develop

strategies to enhance the learning of a wider range of teaching groups.

Action Research is designed to benefit both the researcher and the research participants, as both play a dual role. The research participants should be encouraged to use the opportunity to "investigate and improve their own learning" (Shi, 2006, p217). The students who were working alongside me in this research were given the opportunity to understand why they had found certain aspects either easier or more difficult than others, and thereby improve their own learning.

In all aspects of this study, I have taken care to ensure that the various tasks I have asked students to undertake are directly related to the National Curriculum, the Programmes of Study and Schemes of Work which are in place within the school. Before embarking on the research, I met with the Headteacher to seek her permission to conduct research within the school. I explained the aims of the research, and described the various instruments (pilot studies of various test instruments, tests, observation, semi-structured interviews). In addition to this, I described how the data would be stored, and managed, that student names would be deleted, and that access to any information pertaining to individual participants would be safeguarded, and not made available to those outside the research. It was important to obtain consent from the Headteacher before beginning to gather any data. The Headteacher has ultimate responsibility, and duty of care to the children in the school, and therefore without her permission, I would not have been able to conduct any research. At this early stage, I had intended to conduct video-observations, but permission for this was not granted, due to the potential

problems which might occur from having recorded images of students, and led me to changing the format of the observation schedules.

Having gained consent, the next step was to discuss the project with colleagues in my department, to maintain openness regarding the nature of the research. It was important to share the mechanics of the research with colleagues, as they would become involved, not only through discussion of the development of various test instruments, but also because their cooperation would need to be requested regarding working with their classes, and observing them teach. As I intended to observe students taught by their own teacher, this meant that my colleagues themselves would become participants in the research, and as such, their consent would also need to be sought. Informed consent requires that the researcher explains what will be involved and whether there will be any risks, benefits or inconveniences to participation, and that they have the right to withdraw at any time. In this research, one of my colleagues did take the opportunity to withdraw her consent from participation in the observation task, as she did not feel comfortable with the idea of being observed, however, she was happy to participate in other information gathering exercises, and provided some excellent advice during the development of the language test. As regards the "principles of human duty", I am pleased that she was able to withdraw, as I would not have felt morally content with a study which had been based on an unwilling or uncomfortable participant.

The third strand of consent was obtained from a range of participants who were students in the school. As the students were of an age where they could give their own consent, there was no need to contact their parents. This research has been conducted over several years, and involved around 300 participants, including those who assisted in developing and piloting various test instruments. At each phase, I gave the participants an outline of the research, and what their involvement would be. I had anticipated that some participants may be concerned how participation could affect them, and allowed them to ask a many questions as they needed to satisfy themselves that participation would not adversely affect them. In each group, the same question, concerning position in the various sets, was asked: "Will I be moved down?" This was an understandable concern, and one which I had anticipated, but chose not to pre-empt in my explanation of the research, but rather to wait for it to be asked, as I did not want to guide the participants' concerns in any way. I felt it was important to explain that, although I was a teacher at the school, my role in this activity was not as a teacher; that although the tasks we would be undertaking were related to the curriculum, they were not from the usual text books; that although we would be doing some tests together, the tests would not affect their school performance. In each class, there was a positive approach to participating, and a keenness to know whether the boys or the girls performed better.

Before each phase of the research, before the MLAT-E, the language test, the observation tasks and the interviews, participants were given the opportunity to decide whether or not they wished to participate. It was

important to clarify this issue with the participants, but also to bear in mind the role of the teacher as authority figure. Did the participants really want to take part? Did they have the opportunity to opt-in rather than opt-out? Did my position as a teacher affect the responses given? Would the responses have been any different if an outside researcher had conducted the research? Just as Eisner had taken pains to eliminate bias in his research (Eisner, 1993), I feel that I have taken as many pains to explain at every stage that my role for the period of this research was primarily a researcher and not a teacher.

Pring (2000) indicates that the term "ethics" and "morals" are often interchangeable. There is a 'right to know' expressed by researchers, does this 'right to know' compromise the integrity of the organisation in which the research is being carried out:

> There are consequences for the school or the teachers in an exposition of what the research concludes. Does the researcher have to balance the right to know against possible harm that might follow up from the research – the demoralisation of the teacher or drop in recruitment to the school which might follow from the conduct and dissemination of the research?
>
> (Pring, 2000, p146)

It may be morally right to conduct research, and to expose the results to public scrutiny, however, in doing so, there may be a conflict between how the research is perceived. Could the results of my research influence parents in their decision to send students to the school? Could the research influence the performance appraisal of colleagues? Could the research process

influence the willingness of the Headteacher to give permission for further research to be conducted in the school?

These issues can be addressed through the importance of confidentiality as an ethical consideration. I have not mentioned the name of the school when conducting this research, however, it would not be difficult to discover where I am currently employed, and therefore to discover the identity of other members of the Modern Languages Department. However, as the research exercises, (tests, observations and so on) were not carried out by other members of the department, they will not be held accountable, either positively or negatively for the results. Due to the numbers of student participants, the anonymity of their participation and the time span of the research process, I feel that I can confidently guarantee that individual participants could not be identified.

The issues of considering the ethical position of researcher, particularly in the case of insider research, can be a tangled and complicated web. I have borne in mind the Open University's guiding principles throughout my research:

Principle 1: Compliance with protocol

Principle 2: Informed consent

Principle 3: Openness and integrity

Principle 4: Protection from harm

Principle 5: Confidentiality

Principle 6: Professional codes of practice and ethics.

Throughout the study, I have indicated, where possible, the steps I have taken to ensure that these principles have been adhered to, balancing my duty of care as a teacher with the researcher's duty to inform, while always keeping the concept attributed to Hippocrates at the forefront of my mind:

"Do no harm."

5 The Initial study

At this phase of my research, I intended to determine whether there are any real differences in boys' and girls' aptitude in learning a foreign language, by using the Modern Language Aptitude test, as discussed earlier.

5.1 Using the Modern Language Aptitude test

The test contains four sections:

Part 1 Hidden Words

Part 2 Matching Words

Part 3 Finding Rhymes

Part 4 Number Learning

Part 1 Hidden Words

In this part of the test, students are required to identify the meaning of a word, in English, from a clue word, which has been written according to pronunciation. Phonetic script was not used for this test as it was considered too difficult for younger test takers, although it does occur in the adult version of the test.

Part 2 Matching Words

This section focuses on recognising grammatical structure, with students being asked to recognise adjectives, adverbs, verbs or nouns (in either the position of subject or direct object). Grammatical terms are not used to define these parts of speech, but students are given lengthy examples before the test section begins.

Part 3 Finding Rhymes

In this section, students are required to recognise rhyming words, however, the rhymes are not visual. This section, therefore, tests the students' ability to equate a written word with a sound, and then find a rhyme for that sound.

Part 4 Number Learning

The final section of the test requires students to learn numbers in an artificial language. The numbers 1, 2, 3, 10, 20, and 30 are given, and then students must identify numbers as they hear them. They hear not only the numbers taught in the initial explanation, but also combinations, for example, 21, 13, 32. This section of the test measures the memory skills, as students have to remember the initial 6 numbers given, but also tests their ability to recognise compound words in a new language.

Sample pages from each part of the MLAT-E test can be found at Appendix 5.

The test was initially conducted with two classes, each of French and German. In both cases, the test was conducted in the students' normal classroom, rather than moving to an unfamiliar or possibly more intimidating environment. The tests were conducted during normal lesson times. As the test instructions were provided on audio tape, each class received exactly the same instructions, and exactly the same amount of time to complete each aspect of the test.

After conducting the test with a sample of students from the Fast Track classes, I was surprised to see that there was indeed no significant

difference between boys and girls in aptitude in learning a Modern Foreign Language. Although the test itself did not require a background knowledge in any particular language, it was also interesting to note that there was no significant difference between the performance of the students learning French and those learning German. In order to provide a broader spectrum of results, I conducted the test again with a further group of students, again drawn from French and German classes, but this time from a different ability grouping. Again, the tests were conducted in the students' normal classroom environment, during a normal lesson time and the tape recorded instructions meant that the second phase of testing matched the first. I was therefore able to reproduce the conditions of each test phase to ensure that any anomalies in results could not be attributed to differences in test conditions.

By conducting a second phase of testing I was able to compare the boy/girl results when the research participants were drawn from a lower ability grouping. In this case, the results again showed no significant difference between the aptitude of boys and girls in learning a Modern Foreign Language, and again showed little difference between the French and German cohorts. A summary of the results is indicated below:

Table 2 MLAT-E Initial study Results by Language, Gender and Ability

	German 1		German 2		French 1		French 2	
Gender	M	F	M	F	M	F	M	F
Gender % Average	87.8	87.9	74.4	77.7	88.6	88.1	80.7	79.2
Gender Pupil Number	14	16	8	16	11	19	10	15
Male : **female** bias (grade)	0.1		3.3		0.5		1.5	
Male : **female** bias (num)	2.0		8.0		8.0		5.0	
Variance	23.36	37.53	134.6	104.68	44.14	19.3	70.49	81.37
T-test	0.1		0.7		0.2		0.4	
Deg of freedom	28		22		28		23	
Significance	not		not		not		not	

Table 2 shows the groups of participants as French/German 1 and French German 2. These labels indicate the two ability groupings involved in testing. In each class tested, the percentage of marks achieved by boys and girls was similar. The significant difference between German 1 and German 2, and similarly between French 1 and French 2 is due to the ability setting. The number of boys and girls in each class is indicated in Gender Pupil Number.

Variance is a measure of the spread of results e.g. a population of results - a large variance suggests that there is a lot of mixed abilities in a class (the square root of the variance is the standard deviation – the deviation from the mean. The variance indicates the deviation from the "expected" value). The greater degree of variance in French 2 and German 2 indicates the wider spread of ability in these two classes. Table 2 shows the significant

difference between the potential aptitude in MFL learning of the two sets, when compared with each other.

Table 3 Comparison by Ability

	Set 1	Set 2
set 1 / set 2 average	88.1	78.2
Set 1 / set 2 number	60	49
Set 1 / set 2 bias	9.9	
Set 1/ set 2 number bias	11	
Variance	28.15	93.17
T-test	6.73	
Deg of freedom	107	
Significance	sig	>99.95%

A T-test was conducted for each of the groups. The t-test assesses whether the means of two groups are ***statistically*** different from each other. This analysis is appropriate when making comparisons between the means of two groups. Again it showed insignificant variance between the male and female subjects in each class. It was important at this stage to compare the results between the two distinct ability ranges, merely to determine whether the setting of students had a bearing on the results. For the main study, the results will not be differentiated by set, as the initial study has shown that by using a broad range of ability, I will be able to determine to a satisfactory degree whether there are differences between boys' and girls' performance as well as whether there are differences between the two languages under review.

It must be borne in mind that the MLAT-E is only one form of testing, and the results cannot, at this stage, be usefully compared with existing assessment procedures used in schools in England, however, the results provide an interesting jumping off point for further research. If it is indeed the case that there is little significant difference between boys' and girls' aptitude in learning a Modern Foreign Language, why is there such a great difference in formal nationally recognised assessments such as GCSE?

There are many aspects to learning a language. The choice of language, teaching styles, learning styles, assessment methods, perceptions of the language, socio-cultural aspects of language learning all contribute to the perceived success of learning, and the manifestation of this success in the secondary school curriculum, is the GCSE examination results. My research centres around second language acquisition within the secondary school curriculum. Learning that takes place within this curriculum is specifically assessed under the standards, described by Level Descriptors, and GCSE examinations. All learning must, therefore, be assessed under these standards. If, as it appears from the results of the MLAT, there is no significant difference between aptitude of boys and girls to learn a Modern Foreign Language, and if Carroll's contention that:

> As far as is known, any child who is able to use his mother tongue in the ordinary affairs of everyday life can also acquire similar competence in a second language, given time and opportunity.
>
> (Carroll & Sapon, 2002, p7)

then it follows that the various assessments instruments used in schools, including GCSE examinations, are not providing sufficient opportunity for these similar aptitudes to be demonstrated as outcomes of learning.

5.2 Observation

In order to ascertain **how** students acquire knowledge, it is important to observe them at work, to observe the processes they go through in attempting to learn something new, and then to assess their learning. For the purposes of the initial study, I decided to observe students learning how to use the future tense. Initially, I had planned to undertake this observation task using the perfect tense, however, due to a number of circumstances, it was not possible to conduct the observations at a time when that aspect of the curriculum was being covered in class. As I had originally mentioned, the use of tenses is a key turning point in achieving National Curriculum Level 5, and GCSE Grade C. Therefore, I feel it is just as appropriate to use the Future tense for this part of my research, as it also leads to achieving Level 5, or Grade C. A full list of the current National Curriculum Level Descriptors can be found at Appendix 1.

The initial study involved only one German class leaving the French classes for the main research. This allowed me to conduct a trial of the observation process, and make any changes for further research.

I intended to observe whether there are any differences in the learning and assimilation processes demonstrated by boys and girls, and whether these contribute to their learning. Much has been written about the differences in boys' and girls' achievement in schools, and this achievement seems to be particularly acute in foreign language learning. As I have shown from my initial study of aptitude, there seems to be no significant difference in boys' and girls' aptitude when it comes to learning a foreign language, and so, the logical next step seems to be to look at the learning styles which have often been associated with either boys or girls.

I have chosen to compare Cobb's symbol processing approach with Bruner's computational view, but always bearing in mind Vygotsky's comment that the child must already possess the concepts of the foreign language in the existing knowledge of their own before being able to transfer meanings, either through transmission, or computation. These notions can be loosely associated with Shaffer's views on inductive and deductive teaching styles, which in turn, seem to me to tie in with the popular notion within education that boys learn by taking things apart, and girls by talking it through:

> Girls also tend to prefer to have things conceptualized in usable, everyday language, replete with concrete details. Boys often find jargon and coded language more interesting. As one brain researcher told me years ago, "It's just not as much of interest to females to create the kind of verbal obfuscation legalese uses. If Western culture's founding lawyers and judges had been women, judicial language would be easier to understand."

> Whether it's language from sports trivia, the law, or the military, boys tend to work out codes among themselves and within their own cognating process, and rely on coded language to communicate.
>
> (Gurian et al., 2001, p46)

However, neither Shaffer (1989) nor Erlam (2003) commented on whether there was any difference in the success of these approaches when looking specifically at boys' and girls' learning. With this in mind, I decided to adapt the notions of inductive/deductive teaching approaches to determine whether boys and girls are able to demonstrate that their acquisition of the Future tense matches National Curriculum more closely when exposed to one style or the other, but also bearing in mind Decoo's modalities (Decoo, 1996), as discussed earlier.

The class was split in two. As the class was already accustomed to working according to a boy/girl seating plan, the most effective way to determine which students should be in which group was to simply split them down the middle. This would mean that in follow up lessons, it would be easier to determine which student had been exposed to which approach. Secondly, as the students were already used to working with their male/female counterpart, it would provide a more natural collaborative learning environment for issues which may arise in the lessons following the task. By splitting the class in this way, I would also ensure that each group contained an equal number of boys and girls.

Each group received 20 minutes instruction in the use of the Future tense. The first group were presented with a grid, showing the required word order, with columns entitled subject, verb (*werden*), object, verb infinitive. They were also given a table with the verb '*werden*' fully declined. This group was allowed access to these materials at all times during the instruction, and subsequent assessments. The second group, on the other hand, was presented with a series of examples of the Future tense in use. Initially, they were shown pictures showing future actions, with captions describing the action. The second group were then given pictures with the verb infinitive missing, and then with both the infinitive and the correct part of the verb '*werden*' missing. This group was initially asked to orally complete the missing sentences, and then, like the first group, was presented with a written task. Both of the instruction sessions were audio taped.

Immediately after receiving their initial instruction, both the deductive and inductive groups were given a written activity, to be carried out independently. This was in the form of a gap fill test, with parts of the verb *werden* and the infinitive of the verb missing. An exemplar of this worksheet, and the other materials used throughout the observation task, can be found at Appendices 13 and 14. There were 40 questions in all, and a time limit of 8 minutes was set for the completion of the tasks, although both groups were told that they were not required to complete all the questions in the time allowed.

After completing the gap fill test, the deductive and inductive groups were then split into smaller groups, each with three or four students, to complete an activity collaboratively. This activity consisted of sentences where the words had been jumbled up, with the purpose of seeing how the group could work together to put the words in the correct order. Again, 8 minutes was allotted for this activity, and the groups were encouraged to talk through their progress. Two of the small groups in each of the deductive and inductive sessions were audio taped.

The third task, which was again carried out in small groups, and again with audiotapes being made, involved a picture narrative. By this stage, both halves of the class had accessed instruction into the use of pronouns, the use of the verb *werden*, and the forms of word order required to construct sentences, so this final activity provided a more open task, with the view of drawing together the previous strands into constructing sentences with a concrete purpose – that of describing events in the day of a robot. Each group was provided with a set of four pictures depicting familiar scenes, and annotated with some helpful phrases. Students were required to give four pieces of information for each picture. As well as the help phrases, students could glean information for inclusion from the pictures themselves, such as the time activities took place, from the picture of the clock on the wall. 12 minutes was allowed for the completion of this activity.

One week later, the whole class came together again, and were presented with two post-testing activities. The first was a simple question and answer

activity, often used at the beginning of a lesson to 'get the brain in gear'. For this, a selection of 40 images was shown on a large screen, and students had to give the correct sentence for each image. The second phase of the post-testing involved an extension of the previous picture narrative activity. This time, the students had ten pictures to describe in 30 minutes. Both of these activities were intended to be used as a tool to assess how much information the students had retained from their previous lessons, and how much they were able to reproduce individually.

5.3 Results

There were, in total, 5 phases of assessment:

the gap fill test

the word order task

the picture narrative (small group activity)

the question and answer session

the picture narrative (individual activity)

The danger in carrying out any form of activity in the format of a written test, is that that is exactly how it will be perceived by the students – as a test. When reporting on her own experience of conducting classroom research, Pica states:

> When tasks are used as research instruments, they can appear to be tests to students and their teachers..... In addition, the attractiveness of the activity-orientation and problem-solving aspects of a task can

be offset by its inconsistency with curriculum content. In both cases, rapid abandonment can ensue. Therefore, to enhance their authenticity and ensure their long-term use, we made sure our tasks would be integral to curriculum texts, topics, and assignments, and that they had enough variety among them so that teachers and students would want to sustain their participation over time.

(Pica, 2005, p345)

For the purposes of this research, I needed to create a series of activities which could be incorporated into the Scheme of Work at any point, and would not require specific preparation, however, it was also important that the vocabulary used in the activities should be chosen from the range of activities in the school's schemes of work, in order to ensure integration into the curriculum, as well as giving the students a sense of familiarity with the vocabulary. Had the activities contained nothing but new vocabulary as well as a new grammatical structure, then it would have been difficult to determine whether the students had managed to correctly assimilate the grammatical form, or whether the unfamiliar vocabulary had become a hindrance to acquisition and use of the Future tense.

5.4 Assessment

Each task was assessed according to the number of correct verb structures used. As the focus of the research was into the use of the Future tense, it would have been inappropriate to penalise students for misuse of cases, prepositions or other linguistic structures. Three of the tasks could be marked

by individual student performance – the gap fill test and the individual picture narrative were completed by students individually, but for the word order task, students were each given their own answer sheets, even though the task was organised in small groups. Despite being carried out in groups, there were differences within the group as to the number of correct sentences written. Listening to the audiotapes of two groups in each of the deductive/inductive cohorts, it became clear that in each group, one or two students preferred to achieve individual rather than group success – each group featured at least one student who contributed very little to the group discussion, but preferred to complete their own sheet. Although there is some benefit to be gained from retaining this aspect of allowing each student to complete their own answer sheet, for the main study, I will analyse the results based on the group's activities, as I feel that the idea of working collaboratively at this stage outweighs the need for individual results.

Table 4 Deductive v Inductive groups

Week		Deductive group	Inductive group
1	Gap fill test / 40	21.07	15.85
1	Word Order /20	11	13
2	Question and answer (group) /40	11	29
2	Picture narrative (individual) / 20	13.08	12.83

The gap fill test

As expected, in the gap fill test, the deductive group performed significantly better than the inductive group, as can be seen in Table 4. The deductive group had access to a range of reference materials, including an explanation of the structure of *werden*, a list of personal pronouns, and a list of common verbs and their meanings. Not only did the deductive group manage to write more answers correctly, they also attempted fewer questions. The Deductive group attempted an average of 22 out of a possible 40 available questions, whereas the Inductive group attempted an average of 31 per student, again out of 40. Whereas the Inductive group were relying solely on memory to complete their answers, the Deductive group appear to have relied heavily on the reference materials, checking each answer carefully, and therefore achieved a much higher degree of accuracy, although this group only managed to complete a little over half of the number of questions available, whereas the Inductive group attempted to answer three quarters of the questions available to them. As this was a timed exercise, both groups had the same time period to complete their answers. Whereas both groups had the same time to complete the exercises, the Deductive groups worked more closely together, methodically completing each sentence before moving on, whereas the Inductive groups tended to work as individuals, or as pairs, as can be heard on the audio tapes which were recorded as the exercise progressed.

Word Order

This task was carried out as a group activity, and the groups were encouraged to talk through their processes as they worked. The table shows the mean results for each of the groups, and indicates that the inductive group scored more highly than the deductive group. Whereas in the first task, the information which was required to be completed tied in closely with the layout of the reference sheets, in the word order task, students were required to focus on the examples that had been given to them. In this case, the inductive group, who had been exposed to a wider variety of examples of correctly constructed sentences, scored more highly than the deductive groups, who had to apply theoretical knowledge to practical situation.

A fair indicator of students' confidence in a task can be taken from the "rumble factor" – the amount of noise in the classroom from off task chatter swells at points when children are faced with tasks they find difficult. In this case, there was a greater degree of off-task noise from the deductive groups, indicating that they did not feel quite as confident with this task as they had with the first one. The inductive groups, however, displayed a higher degree of off-task noise throughout all the group tasks, and, as can be heard from the audio tapes, none of the inductive groups appeared to feel entirely comfortable or confident with the tasks.

It was interesting to note that in the deductive groups, with access to a variety of reference materials, the students assimilated the German structure into English:

(Deductive Group 1)

GIRL 1: Du wirst einen Kuchen backen

BOY 10: oh yes, a cake bake

The inductive groups, on the other hand, with no access to reference materials, coped just as well with this task, but noticeably, did not need to translate the sentences into English as frequently.

(Inductive Group 2)

GIRL 10: would it be.. *er wird..*

BOY 12: ja, er wird, ... would it be sparen Geld? or Geld sparen? it's got to be Geld sparen.

GIRL 16: ok

The Picture Narrative – group task

This task involved using the newly acquired skills in the Future tense to construct sentences using a range of familiar and unfamiliar vocabulary. Although the entire lesson revolved around the use of the Future tense, in both inductive and deductive cohorts, students referred to the activities in the sense of a past action:

(Deductive Group 3)

GIRL 1: how do you say they went by bus?

BOY 10: I dunno

GIRL 1: ok.. he went to the town with Alfie

BOY 13: *wird*...

BOY 10: don't call him Alfie though...

GIRL 1: ok..come on...

GIRL 1: Alfred wird mit Alfie nach der Stadt fahren..

(Inductive Group 2)

BOY 1: ich werde

BOY 6: mit dem Bus in die Stadt fahren.

BOY 1: yeah... so *ich werde..* another one...

BOY 6: then the 2nd one

BOY 1: ich werde mit dem Bus in die Stadt gefahren

BOY 6: no, not *gefahren*, just *fahren*

BOY 1: oh yeah, sorry

BOY 6: can't do past tense and future tense in the same thing

In this second example, Boy 6 recognised the error, and commented on it. His comment was typical of the inductive groups' tendency to use rules, even when the rules had not been explicitly given. The deductive groups did not discuss any form of rules, whereas both inductive groups' discussion contained references to rules, such as moving the verb to the end, or using previously learned rules such as 'Time, Manner, Place'

(Inductive group 1)

GIRL 2: ein Buch..

GIRL 11: does the verb go at the end?

BOY 11: no the verb always goes at the end..

GIRL 2: so you'd have *ein Buch leihen,* and then that verb goes at the end and then you have to put *gehen*

GIRL 11: no, ein Buch leihen, zur Bibiothek gehen, cause he's..

BOY 11: no, that would be last, cause time, manner, place – that's place

GIRL 11: yeah, but I am saying..

GIRL 2: the verb always goes to the end, but that verb's going to the end.. so..

A sample of how the groups talked these tasks through can be found at Appendix 17.

5.5 Post-testing

A week after the initial sessions, the whole class came together again for a post testing session. During the first of two tests, the class were asked to identify correct sentences from a range of 40 pictures. The students had to raise their hand if they knew the answer, and the first person with their hand up was able to answer the question. During this exercise, the inductive group answered 29 questions correctly, whereas the deductive learners answered only 11. After a gap of one week, the inductive group had retained more information than the group who had learned through receiving explanations. However, it must be remembered that this Initial study only involved one

class, and therefore this difference may be due to the small sample size, and the particular skills of the individuals within the group.

The second phase of the post testing involved students completing a further picture narrative. The pictures were an extension of their original task, however, with an additional set of pictures to describe the activities of an entire day. Students were allowed to use their dictionaries for this task, as they are accustomed to using available resources in class activities. There was, however, little significance between the performance of the inductive and deductive groups in this task. The answers were marked on the basis of the number of correct sentences each student managed to produce. Even though the deductive group had not been able to remember the Future tense structure for an earlier exercise in class, when able to use reference materials again, they scored as highly as the inductive group.

5.6 Interviews

The final aspect of the observation phase of the research was to conduct interviews with 4 students to elicit their opinions on their learning processes. All students were asked the same questions, enquiring about what they had learned, how they had learned, whether they found the tasks easy or difficult, and what they would do differently in the future. Before conducting the interviews, I had explained to both cohorts how the two halves had received their instruction. This was necessary, to allow the students to reflect on their learning processes, and to make their own comparisons with the way they feel they learn best.

The 4 students were selected to represent the inductive and deductive groups, with one boy and one girl chosen from each group. The interviews were conducted in a quiet environment, and audio taped for future reference. When describing their learning processes, both students from the deductive referred to the use of reference sheets, but when asked how they would prefer to learn differently, said that they would rather have more examples to follow.

AT: Now, can you describe for me how you learned? What examples were you given? What processes did you go through?

BOY 10: well... like... looking at the sentence structures on the sheet.. and then.. just looking .. and.. which verb goes at the end.. and then.. which *werdes* go with *sie* and *er* and that, and then just lay it out like that.

AT: Now that you have seen both sides, one group did it by example, and the other group did it by ...

BOY 10: yeah.. well.. I would do example... and like do the sheet, and then take the sheets away and do an example so you can do it without the sheet, instead of having the sheet there, cause then you can still look.

AT: If I had taken the sheet away from you last week what would you have done?

BOY 10: I would have found it harder but when we had the sheet back on another one, I would have looked.

These interviews were conducted the day after the post-testing, and these students were at that point aware that they had not managed to remember the structures as well as their counterparts in the inductive group.

The students from the inductive group were less able to describe the processes they went through, referring only to the number of examples they had seen. The inductive group also explained what they had experienced – but then referred back to the lack of process information in the discussion.

> AT: Can you tell me how you learned it? Can you describe how you learned it?
>
> GIRL 11: There was a lot of examples. Just a lot of slides going over and it, so it was really in your brain.
>
> AT: Did that work?
>
> GIRL 11: Yeah, I think it did, I think you need a mix of both though, really, to.. really learn well.. I mean the patterns work well, you are not always having to rely on a sheet, but… you need that reference sometimes.

None of the students were entirely happy with the way they had learned, and felt that more practice would be necessary in order to confidently use the Future tense in unfamiliar situations. This is understandable, given that the students only had a limited number of lessons in which to practise this new skill.

5.7 Gender Gap

Table 5 Analysis of Initial study by Gender

	All boys	All girls	Deduct-ive boys	Deduct-ive girls	Induct-ive boys	Induct-ive girls
Gap fill test / 40	17.15	19.86	17.86	24.29	16.33	15.43
Word Order / 20	12	12	11	11	13	13
Picture narrative (individual) / 20	13.45	12.54	13.33	12.83	13.6	12.28

When looking at the students' test results from the point of view of gender, there appears again to be very little difference between the performance of boys and of girls in any of the tasks when undertaking the group based word order test, or the individual picture narrative, where students were allowed access to reference materials. However, there was a significant difference in the gap fill test. The deductive girls scored significantly higher than the deductive boys, whereas the inductive girls scored slightly lower. The boys' scores remained consistent whether they received deductive or inductive instruction, whereas the girls experienced a significant difference. Given that each half of the class contained an equal range of ability, and the scores of girls in the individual picture narrative were consistent across the class, it must be concluded that the girls who received inductive instruction found the gap fill task, where the correct part of the verb *werden* and the infinitive of the main verb had to be included, to contain greater challenges. But the greatest challenge of all was to put it into practice :

AT: and, what were the things you found most difficult?

GIRL 11: em.. I think it was doing the pictures of Robert the Robot, that was to actually put it into practice and make sure you remember the right form of 'will' and…trying to remember them all.

Without reference sheets, the inductive learners had to rely solely on their memory of the various forms of *werden.*

Whether or not this is an anomaly will be shown in the main study where a wider sample of students will take part.

It must be noted however, that the results achieved in the initial study cannot be taken to be representative of a larger sample, as they involved only a small sample of students, and were designed to test the format research rather than to glean usable results. However, various issues were raised during the initial study, which have assisted me in refining the main research phase.

5.8 Revised lesson structure for observation.

Following the initial study it became necessary to revise the lesson structure for the observation phase of the research. The most obvious change would have been to allow 3 lessons rather than 2 to give more time for the students to assimilate the information required to effectively use the Future tense, and for effective practice of the structures. However, timetabling constraints within the school meant that I had to retain the 2 lesson format. However, as I was only able to spend two lessons with each of the 4 classes involved, I

did manage to incorporate preparatory material with each class, which was delivered by the normal class teacher. The inductive groups were given the opportunity as an integral part of their lessons to 'construct their own reality (Cobb, 1994). Further to this, whereas the initial study involved small groups of boys and girls working collaboratively, for the main research I have decided to conduct the small group activities in single sex groups only. The sample size in the initial study was too small to allow differences between genders to become apparent, but in the larger sample involved in the main research phase, any disparity in achievement by gender should become more obvious.

A further change is the order of the activities. For the revised lesson structure, I have placed the word order task before the gap fill test. The students who were interviewed stated that they would prefer to have a greater range of examples to follow to gain confidence in using the Future tense. The word order task provides an opportunity for students to see a greater range of exemplar sentences, and to discuss the structure of these, before having to construct sentences on their own.

In order to determine whether the students, particularly in the inductive group, are able to express and explain any rules that have become apparent to them in the exercise, I have also built in plenary sessions within each observation lesson. This will allow students to discuss the efficacy of their learning, and will give me a greater insight into whether they have

experienced actual deduction, or conscious or unconscious induction (Decoo, 1996).

Although I had originally intended to use the Perfect tense in both French and German as a vehicle for carrying out research, I decided to use the Future tense, as described in the Initial study. My initial concerns with the use of the Future tense were related to the structure of the two languages – whereas German uses *werden* as an auxiliary verb in this context, French uses verb endings to describe use in the future. However, by using the simple future in French (with the verb *aller*) the similarities between the mechanics of the Future tense in both languages become more apparent. There is not complete parity, however, as there is no change to word order in French, which means that it is not as important for the students to recognise the main verb. As the National Curriculum states that Level 5 can be achieved by talking about events in the past or the future, my aim to enable students to cross the level 5 hurdle could still be met. In addition to this, the activities and assessment tasks, which I had chosen to use, are not dependent on fitting in to an existing Scheme of Work, which gives greater flexibility for the timing and conduct of the research, particularly when extending it to a second school.

I had originally intended that each class selected for participation in the observation phase of the research would be taught by their own class teacher. However, there was a certain reluctance from one of my colleagues to participate in research which she felt would place a judgement on her

performance as a teacher. This is due, in part, to the additional stresses placed on teachers by a formal observation schedule within schools. Due to this, I decided that it might be better if I conducted all 4 observation lessons personally, rather than having three classes taught by their normal class teacher, and one taught by someone else. This caused me to question again the role of teacher/researcher. I had originally intended that each class be taught by their own teacher in order provide a stable and comfortable learning environment. I was concerned that an 'outsider', even though that outsider was known to the students, might compromise the learning process. However, there are two factors which lead me to consider that my own role as teacher and researcher did not compromise the learning experience of the students: firstly, that I had, at some point in their school life, taught all of the students involved, and therefore I was not an 'outsider', and secondly, as the lessons which made up the observation phase of the research brought the students outside of their normal syllabus and into a series of tasks which were not an intrinsic part of the scheme of work, the combination of different tasks/different teacher created an opportunity for the students to behave in a different way. What I mean by that is that the students had the opportunity to have a clean slate during the observation phase, rather than reacting in ways that were expected by their normal classroom teacher. In addition to this, I was able to achieve consistency across all 4 lessons – as each class was taught by the same person, there would be no question of bias when comparing all four lessons. In retrospect, I feel that the students benefited more from having a change of teacher for the observation phase, in that they were able to separate these activities from their normal classroom routine.

However, I had to make a particular effort with my own class, as they remained the single group whose normal classroom teacher was participating in the research. No participant observation can ever be completely neutral, and I felt it was necessary to spend time with my own class to explain the differences between my role as a teacher and as a researcher. Using a series of discrete activities which were not recognised by the students as part of their normal scheme of work, and by changing the seating arrangements, the arrangement of desks, all aided the students' recognition that the observation lessons were a little different from the norm.

For this observation phase, the group work tasks were carried out in mixed groups. The audiotapes of the groups working together do not display a particular leadership role being taken on by either boys or girls within the groups. The initial study results showed little significant difference between the performance of boys and girls, so the question remains, whether boys and girls learn differently, or whether these results were merely an anomaly based on a small sample size. This research has been prompted by the growing difference in GCSE results of boys and girls in French and German, where girls tend to outperform boys in both languages. Yet, there appears, from this small sample, to be little difference in the boys' and girls' ability to acquire information through either deductive or inductive teaching styles at this stage in their learning.

5.9 Next steps

Each year, when GCSE results are announced, we face a barrage of headlines shouting about the difference in achievement of boys and girls, and yet, within the small sample used in my initial study, there appears, to be no significant difference between boys' and girls' aptitude in learning a modern foreign language. In the initial study, I carried out research into using a deductive or inductive teaching style, and again, there was little difference, in this small scale study, between boys' and girls' achievement. The only significant difference was in the case of the gap fill test, where the deductive girls scored more highly than the deductive boys. It must be borne in mind, however, that this anomaly may be due to the small size of the group participating in the initial study, and to the individual characteristics of the girls themselves rather than a difference between boys and girls when participating in this kind of test. However, the inconclusive nature of these results has caused me to reconsider the following question: if there is little significant difference in aptitude, and only small differences in learning style, why is the difference in performance at GCSE so great? I feel that there are aspects of the GCSE curriculum itself which may provide the answers to this question, and which may merit further research at a later stage.

However, at this stage, my next step must lead me to considering whether the aptitude test (MLAT-E) was able to provide me with sufficient evidence of difference or similarities between boys' and girls' aptitude, and as such I began to consider whether a test which paid greater attention to the

identification of word and phrases in the foreign language may be of greater benefit, when viewed in tandem with the results from the MLAT-E.

6 Language Test

Comenius stated that :

> The study of languages, especially in youth, should be joined to that of objects, that our acquaintance with the objective world and with language, that is to say, our knowledge of facts and our power to express them, may progress side by side.
>
> (Comenius in Keatinge, 1910, pp203-4)

Although I had used the MLAT-E to assess the aptitude of boys and girls in learning a Modern Foreign Language, I felt that the MLAT-E alone did not go far enough into assessing aptitude for the particular languages under study, as the test was conducted in English. It is difficult to fathom how an understanding of one's own language can provide indicators of aptitude for learning a foreign language. The weaknesses of the MLAT-E, such as US spelling and voice instructions, led me to consider whether the MLAT-E alone, could demonstrate sufficient characteristics of aptitude within an audience of 12-13 year olds in Essex. Although the MLAT-E had used some words which may be more familiar to an audience of speakers of US English, at least those discrepancies were consistent across the sample. However, I felt that it was necessary to develop a specific Language test for a UK audience. As my research is concerned with not only the differences between boys' and girls' aptitude, but also is concerned with any differences contained within the language itself, I decided to develop a test instrument to determine whether aptitude could be measured when faced with a specific

language. Having already used the MLAT-E, and amassed a range of data based on that test, I decided to follow the same format as Carroll and Sapon (2002) had used, using 4 distinct parts, each designed to test a different function of language:

Part 1 – Word Recognition

Part 2 – Grammar handling

Part 3 – Rhyming Words

Part 4 – Learning New Words

Maintaining this four part structure meant that participants would be familiar with the format, and I would be able to make direct comparisons between the two tests. In their aptitude test development, Kiss and Nikolov (2005), adopted a similar approach, using a similar age range of students (12 year olds) by including sections where participants were required to associate sounds with written symbols, identify semantic and syntactic functions, recognise structural patterns, and memorise lexical items. It is interesting to note that in this test, conducted in a number of schools in Hungary, where students were tested on their aptitude and ability in learning English, girls scored significantly higher in all aspects of the test than boys.

6.1 Word list

A vital part of ensuring that the Language test would work involved selecting appropriate words. I wanted to choose words that represent everyday objects, but are not specifically centred on boys' or girls' spheres of experience. Murphy (1994) highlights the need for caution when assessing

the content of a task, as the experiences of test-takers outside the classroom may have an effect on their progress inside the classroom. It was important therefore, to eliminate bias choosing a range of objects which both boys and girls could relate to. If I had wanted to investigate whether either boys or girls could access and memorise individual words which were skewed towards the experiences of either gender, as in Bügel and Buunk's (1996) investigation into sex differences in reading comprehension, I would have built in bias towards both boys and girls, but in this case, it was the general accessibility of the vocabulary that was of prime importance, rather than an assessment of whether boys or girls had demonstrated a preference for learning one type of word or another.

In addition to this, I wanted to ensure a range of words which did not have cognates in English, and represented a range of genders in French and German. There are three genders of nouns in German, (masculine, feminine and neuter), but only two in French. To provide similar degrees of difficulty I aimed to include a range of nouns beginning with vowels in French (to use *l'* as well as *le* or *la,*), to give a similar range of definite articles. I chose to use definite rather than indefinite articles with each noun , as the indefinite masculine and neuter articles in German are identical (*ein*). A copy of the word list for the vocabulary learning phase of the test is found at Appendix 6.

6.2 Test Phases

Part 1 Word Recognition

Part 1 of the test involves word recognition. The format adopted in the MLAT test would not have been workable in a foreign language version of the test, as I felt that this part of the test should require students to merely recognise words, rather than understand their definition. In my choice of vocabulary for all aspects of the test, I had chosen words which were largely unfamiliar to the students in the sample, therefore, it was more important at this stage to understand whether participants could identify selected words from a range of similar sounding words. Part 1 consists of 20 unfamiliar words. Each word is spoken, by a native speaker, and participants must select the word they have heard from a list of 4 words.

Part 2 Grammar handling

Part 2 mirrors the second part of the MLAT-E. In this section, participants were required to identify parts of speech, by selecting the correct word in a sentence. The emphasis here was on the ability to recognise nouns, verbs, adjectives, prepositions or time phrases. In this phase, it was more important that students were able to make sense of the sentences, as this would aid their ability to identify the correct noun, verb, adjective, preposition or time phrase. There were 30 sentences in all, and they were based largely on the structures to which participants had been exposed in their course materials.

Part 3 Rhyming Words

Part 3 was again based closely on the MLAT-E test. In Part 3, participants were required to identify rhyming words. The version of the MLAT-E test

which I had used was for a US audience. Due to the differences in accent between American and British English, it is possible to cast doubt in the effectiveness of this particular section, as some accent variances may affect the answers. The same would apply to such a section dealing with French or German rhyming words, however, the test participants do not yet have such a finely tuned ear to identify subtle differences in accent, and were instructed to choose the closest rhyme to the original word. Again for Part 3, words were chosen from outside the range taught in the Schemes of Work adopted in the school, as the task was intended to ascertain whether participants could identify the rhyming pairs, untrammelled by previous experience. In both French and German, it was important to select a range of words for inclusion in the test which did not contain visual rhymes. There were 40 words in this test, which represents the same number as found in the rhyming Section of the MLAT-E.

Part 4 Learning new words

The final test phase involves learning new nouns. When participating in the MLAT-E, the students had already participated in a test which involved a fictional language, and so there did not seem much value in repeating this kind of test. However. learning new words is an intrinsic part of language learning, and as such, I felt it was important to retain this element of the test, albeit in a different format. I decided to conduct this phase using a series of every day words, in either French or German, which were unfamiliar to the students

Initially I had decided to present the new words on a page, and give the students a defined period to learn them. However, this could mean that some students spend longer on one word than another. To ensure that all students have an equal amount of time to see each word, I decided to present the new vocabulary as a slide presentation, with the word printed on each slide, and with each word spoken at the same time. The slide presentation was looped to present twice, after which, students were given 4 minutes to commit the words to memory. After having had time to memorise the new words, which again were selected from a range of unfamiliar vocabulary, and again provided a balance of genders, and avoided cognates, the participants were asked to choose from 4 possible alternatives, the word which matched the image shown. Whereas Carroll and Sapon (2002) emphasised a new fictional vocabulary for this section of the test, I felt that using a range of words from within the language sphere that participants had already begun to study would provide me with a greater comparison of their aptitude for studying either French or German.

Having prepared the tests in both French and German, I selected two pilot groups, from the year 10 classes to ascertain whether the test would be of any value, and whether any changes would need to be made before using it on a wider audience. As well as completing the test, I felt it was important to seek the opinions of the participants by asking them to comment on their views on various aspects of the test: the length, timings, suitability for year 8 students. Immediately after the test, each group of students participated in a general discussion on their feelings about the test, and were given the

opportunity to make suggestions for the test development. As both groups consisted of only 14-16 students, all participants had the opportunity to express their views. Following the general discussion, the participants then summarised their own opinions on each section of the test. These comments can be seen at Appendices 11 and 12.

Whereas the MLAT-E test instructions were played via audio-cassette, for the French and German versions, all the instructions and examples were recorded and presented using a visual slide presentation. Those participating in the trials of the test commented that they preferred to hear instructions given by a familiar voice, and in an accent that was more easily recognisable. I have included the script for instructions for this test at Appendices 9 and 10.

6.3 Language Test Pilot

As I had not used this language test as part of the initial study, I felt it was important to trial the test on a small group of students. Initially, students from year 10 French and German classes took part in the trials of the language test. For this trial, I needed to find participants who could not only complete the test, but could also give advice on its relative merits. In a sense, these students acted as a Focus group in the test development, as their role in completing was not only to see if the mechanics of the test worked, but also to give their views on each section, and to take part in a class discussion to share their views on improvements that could be made. This group was

made up of 30 students, of whom 16 were studying French and 14 were studying German. After completing the test itself, I asked the students to write their opinions on each part of the test, commenting on:

- Whether the instructions were clear and could be followed;
- Whether the content would be achievable by students in year 8;
- Whether enough time was allotted to each section.

They were also encouraged to add any further comments which they felt might improve the test. This was followed by a general discussion on the efficacy of the test. Their views can be categorised as follows:

Part 1 Identifying words

All students found that the instructions given to this part of the test were easy to follow, clear and concise.

Part 2 Matching Words

Again, all students found the instructions were clear, and benefited from the examples which had been shown. These participants had not previously seen the MLAT-E test, and so were not familiar with the format of the questions. Some students found this section of the test to be 'tricky' and 'quite hard'. It is interesting to note that 4 of the French students recognised that this part of the test included 'tricks' with one student commenting that "There should be no trick questions" and another adding that this section was: "Quite tricky – but very good for catching out".

Part 3 Rhyming Words

This section was considered slightly easier than the previous one by all students. Nine out of the fourteen German students in the sample

commented on the need to pronounce the words, or sound them out in order to work out which words rhyme most closely. However, only two of the French students made the same comment. The French students were more concerned with the length of the task, commenting that 40 questions was probably too many. Although most students thought that too much time had been given, some felt that they would have preferred a little longer to complete the test.

Part 4 Learning New Words

This part of the test involved most closely the kind of task which is familiar to students in year 10 – learning new words, and the familiarity with the concept was noted by the students, most of whom found this section the easiest to complete. Although some felt that they were given too long to learn the words, the majority commented on the challenging nature of the task, and felt it would be appropriate for year 8 students.

General comments

Most of the students felt that there was too much time given for each part of the test, and the gaps between each question were too long. Some students commented that they became confused by having the questions numbered in the Target Language, particularly in Part 1, as this led them to be confused about which foreign word was included in the test. Although all students are familiar with Target Language question numbering in Listening activities through their normal classroom materials, I decided to renumber each question in English to avoid possible confusion.

Whereas in the MLAT-E, participants seemed to have the greatest difficulty in the grammar handling question, in the French and German tests, the initial evaluation shows that the Rhyming section (Part 3) held the greatest difficulty, and this was even more pronounced in the French test, where the mean mark for the group was 59.2% as compared to 78.12% for German rhyming. However, whereas the German participants felt this was the hardest part of the test, and commented on the difficulties of not being able to say the words out loud to determine the pronunciation, the French students seemed generally happy with the rhyming section, commenting only on the length of the test itself, and the ease of completion. However, in view of the comments, I decided to shorten the rhyming section to 30, rather than 40 words, and make similar changes in the timing of this part of the test, removing those questions which had been perceived as 'tricks' by the sample group.

In Part 4 participants were required to learn new nouns. As I have previously explained, I had initially planned to present the new words on a page, and give the students a defined period to learn them. However to ensure that all students were exposed to the new vocabulary for equal amounts of time, and could not therefore focus more on one word than another, the new vocabulary was introduced by a slide presentation, with the word printed on each slide, and with each word spoken at the same time, linked to the slide by sound files. Whereas in the pilot study, I had organised the presentation on a loop, so that the complete presentation was seen twice, for the main study, I presented each word twice, before moving on to the next word. I

decided to present each word twice concurrently rather than repeating the presentation twice, as this is the format used in many listening tasks in normal classroom activities, and affords the students the opportunity to hear each word twice before moving on, therefore allowing them to commit it to memory. Participants were then given 2 minutes to memorise the new words. After having had time to memorise the new words, which again were selected from a range of unfamiliar vocabulary, and again provided a balance of genders, and avoided cognates, the participants were asked to choose from 4 possible alternatives, the word which matched the image provided.

After making revisions to the test as indicated by the students who had participated in the Pilot, I was the in a position to use it to assess the aptitudes of year 8 students in specific aspects of learning French and German, using the same participants groups as in the second phase of the MLAT-E testing. By involving the same students in both the MLAT-E and the language specific test which I had developed, I should be able to see whether there were levels of consistency across performance in the two tests. Although my pilot study of this test had enabled me to determine whether the test was feasible in terms of testing, whether I had selected an appropriate range of words, whether there were obvious differences in the word selection across two languages, whether each section of the test could be completed at an even standard, as well as assessing the presentation methods, timings, and ease of completion of the test paper itself, I felt that by comparing the results of the language specific test with the similar aspects of

the MLAT-E with the same participants would provide greater evidence of parity between the two test styles, and therefore provide evidence on the language specific test as a measure of assessing language aptitude, but not as a measure of predicted ability. The aim was to provide a comparison of general aptitude in MFL learning with aptitude in a specific language to which the students have had exposure for 18 months at the time of testing. This can then be compared to teacher assessments of progress within the language, based on twice yearly classroom based progress assessments and an annual formal examination process.

7 Main Research

Following on from the data collected during the Initial study, I decided to conduct the MLAT-E test again, but this time using a wider sample, made up of 6 classes in total. The initial results which showed very little difference between boys' and girls' aptitude in MFL learning were quite surprising, and so I felt it was necessary to determine whether these results could be replicated. Although these results were interesting, they did not give me the opportunity to assess whether there were indeed any real differences between boys' and girls' ability to learn within the context of the language itself, as the MLAT-E test is conducted through the medium of English, which, although this can give an indication of general aptitude in MFL learning, cannot give specific information on the differences experienced by students who learn different languages. Therefore, I developed and trialled the alternative test, based on the style and principles of the MLAT-E test, but conducted in either French or German.

Whereas the Initial study was limited to a small group of participants, for the main research I was able to include a broader spectrum, drawn from the Year 8 students, but was also able to involve some Year 10 students in a pilot of the Language test. The number of participants in each phase of the research is outlined below:

Table 6 Number of participants in MLAT-E tests

MLAT-E			
Initial study	Boys	Girls	Total
Set 1 French	11	19	30
Set 1 German	14	16	30
Set 2 French	10	15	25
Set 2 German	8	16	24
Total	43	66	109
Main Research	Boys	Girls	Total
Set 1 French	16	15	31
Set 1 German	12	18	30
Set 2 French	13	13	26
Set 2 German	15	16	31
Set 3 French	6	22	28
Set 3 German	14	17	31
	76	101	177

Observation Tasks			
Initial study	Boys	Girls	Total
Set 1 German Deductive	7	7	14
Set 1 German Inductive	6	8	14
Totals	13	15	28
Main Research	Boys	Girls	Total
Set 2 French Inductive	11	15	26
Set 2 German Deductive	13	13	26
Set 3 French Deductive	13	17	30
Set 3 German Inductive	13	15	28
Totals	50	60	110

Language Test			
Pilot	Boys	Girls	Total
Year 10 French	3	14	17
Year 10 German	3	11	14
Totals	6	25	31
Main Research	Boys	Girls	Total
Set 1 French	10	11	21
Set 1 German	11	19	30
Set 2 French	16	14	30
Set 2 German	10	14	24
Set 3 French	10	18	28
Set 3 German	13	17	30
Totals	70	93	163

In each language, Set 1 represents those students who are in the upper ability band, as determined by the school's setting procedures, which are based on KS2 SATs results, as well as CATs testing. Sets 2 and 3 are mixed ability groups – there is no difference in overall ability between students in Set 2 and Set 3.

7.1 MLAT-E test

The original MLAT-E test was conducted with 4 classes in total, comprising 109 students (66 girls, 43 boys). Of these students, an equal number learn French and German. Whereas in the initial study, I had intended to conduct this test with only two classes, I had extended it further to include a further two classes as I felt the initial sample size may not have given a true reflection of aptitude, as it was based on a small sample, which was made up entirely of students at the upper end of the ability range for their age. For the main research, I increased the number of participants again, by including 6 classes, which enabled me to investigate a larger sample again, but, more importantly, I was able to include students with a broader spectrum of ability. For the main research, 177 students participated in the MLAT-E test, made up of 76 boys and 101 girls. The results of this phase of testing can be seen in Table 7.

Table 7 MLAT-E Test 2007

	Gender		Language		German		French	
overall ave	80.0		80.0		79.9		80.1	
test	*Male*	**Female**	*French*	**German**	*Male*	**Female**	*Male*	**Female**
test ave	*78.7*	**81.0**	*80.1*	**79.9**	*78.4*	**81.1**	*79.1*	**80.8**
test number	*73*	**97**	*85*	**85**	*38*	**47**	*35*	**50**
test ave diff	**2.3**		*0.2*		**2.7**		**1.7**	
number diff	**24.0**		*0.0*		**9.0**		**15.0**	
variance	*97.88*	**88.48**	*79.52*	**107.93**	*103.27*	**110.63**	*94.67*	**69.43**
T test	**1.5**		*0.1*		**1.2**		**0.9**	
Degrees of freedom	**168**		*168*		**83**		**83**	
sig	**not**		*not*		**not**		**not**	
Standard Deviation	9.9	9.4	8.9	10.4	10.2	10.5	9.7	8.3
Total St Deviation	9.7		9.7		10.4		8.9	

The results were analysed by Gender, by Language, and again by Gender within each language. As with the results from the previous year's study, these results again show that there is no significant difference between the aptitude of boys and girls, regardless of whether they have been assigned to learning French or German. When compared with the previous year's results, there was a much greater degree of variance in this year's results, but that is merely because in the current testing, the students' were not divided by ability grouping, but rather the results represent the total range of students in the sample. A T-test was conducted for each of the groups to determine whether the two groups were statistically different from each other. This analysis is appropriate when making comparisons between the means of two groups. Again it showed insignificant variance between the male and female subjects, and between the two languages. This confirms the results of the previous test results, and shows that with two different sample groups there is no significant difference between boys' and girls' aptitude in learning a language as measured by this test.

7.2 Language Specific test

The next phase of testing involved the language specific version of the MLAT-E, which I had developed and trialled earlier. This was used to determine whether the results of the MLAT-E would be replicated within the context of the specific language learned by the sample groups. I have already outlined the principles for the language specific test, and the outline of the 4 parts of the test, focussing on word recognition, identifying parts of speech, rhyming words, and learning new words. Having conducted a trial of this test among a smaller sample of students of both French and German, I was able to make some small refinements to the test itself, before conducting the test on a wider sample group.

7.3 Language Test Sample

The sample group for this test comprised 163 students (70 boys, 93 girls) from 6 classes (3 French, 3 German). The sample comprised a broad range of ability levels, as can be seen in the degrees of variance.

Table 8 Gender difference in Language test

	Gender	
overall ave %	74.0	
test	Male	Female
test ave %	73.3	74.5
test number	70	93
test ave diff	1.2	
number diff	23.0	
variance	122.67	112.58
T test	0.7	
Degrees of freedom	161	
sig	not	
Standard Deviation	11.1	10.6
Total St Deviation	10.8	

Table 8 shows the initial test results, when viewed by Gender. As with the MLAT-E, it shows that there is no significant difference between the performance of boys and girls in the test.

However, when the results are viewed by Language, a different story begins to emerge, as can be seen in Table 9 below:

Table 9 Differences in Language

	Language	
overall ave %	**74.0**	
test	German	**French**
test ave %	77.32	**70.45**
test number	84	**79**
test ave diff	6.8	
number diff	5.0	
variance	129.89	**79.19**
T test	4.2	
Degrees of freedom	161	
sig	sig	>99.95%
Standard Deviation	11.4	8.9
Total St Deviation	10.8	

When looking at the results analysed by language, there is a significant difference between the overall results from the German and French samples. Although the sample classes represent a similar overall ability, and, as can be seen later in this report in the results of Teacher Assessments, both language groups attain similar achievements when it comes to language learning within the context of the National Curriculum, as represented by National Curriculum levels, the differences in this phase of testing are significant. When viewed by language learned, those students who learn German performed significantly better than the students who learn French.

However, when the differences in gender are analysed within each language group, there is again no significant difference between the performance of boys and girls within the context of the language they have been learning, as shown in Table 10.

Table 10 Gender Differences by Language in Language Test

	German		French	
overall ave	77.32		70.45	
test	Male	Female	Male	Female
test ave	76.0	78.2	70.7	70.2
test number	34	50	36	43
test ave diff	2.2		0.5	
number diff	16.0		7.0	
variance	121.1	136.55	113.49	52.39
T test	0.9		0.2	
Degrees of freedom	82		77	
sig	not		not	
Standard Deviation	11	11.7	10.7	7.2
Total St Deviation	11.4		8.9	

As can be seen, the differences here emerge between languages studied, and not between the genders of the test participants. This may be due to a variance in degrees of difficulty in the two tests, although I had aimed to

create two language tests with similar kinds of words. I had already discussed the differences in linguistic difficulty with colleagues, to determine whether they felt there was a bias towards one language or the other. It would be necessary to conduct this test with a much larger sample, or indeed with a group of students who have had equal access to both languages to determine whether the differences in language results are due to the nature of the language itself, or due to one test being more difficult than the other.

It is interesting to look at each specific test component to determine whether students of each language and of each gender performed differently according to the tasks required.

As can be seen from Table 11 below, there are significant differences between the performance in the test, when viewed by language. In Part 1, where participants were required to listen to a range of words, and choose the word they had heard, basically, matching sound to print, the French students performed significantly better than the German students, with the French students scoring a difference of 6.3% on average. It is also noteworthy that there is a significantly lower variance in the sample population among the French students than among the German. One can conclude from this that, if the two tests are considered to be of equal degrees of difficulty, the differences in results are due to the differences in each language of matching a sound to print. This part of the test did not require participants to understand the meanings of the words spoken, but merely to select them from a range of 4 words. It is interesting to note that there was

such a broad difference between the two languages in this part of the test. It could be argued that as German has a closer relationship to English in spelling (James, 1979) these results should have been reversed, with the students who have had access to learning German scoring higher than their French counterparts.

Table 11 Component parts of language test, compared by language

	part 1		part 2		part 3		part 4	
overall ave %	94.4		60.2		58.8		82.5	
test	Ger	Fr	Ger	Fr	Ger	Fr	Ger	Fr
test ave %	91.25	97.85	67.57	52.4	67.37	49.79	83.09	81.77
test number	84	79	84	79	84	79	84	79
test ave diff	6.6		14.8		17.0		1.3	
number diff	5		5		5		5	
variance	158.3	54.93	367.1	318.5	240.4	145.1	207.7	296.8
T test	4.02		5.06		7.73		0.52	
Degrees of freedom	161		161		161		161	
sig	sig	>99.95	sig	>99.95	sig	>99.95	not	

Parts 2 and 3 showed the opposite result, in that in both of these parts, students of German performed significantly better than students of French. In Part 2 students were required to identify a verb, noun, adjective or preposition within a sentence, and identify a similar verb, noun, adjective or preposition within a second sentence. In the MLAT-E, this was the section which proved to be most challenging for all students, and so it came as no surprise that the students found this difficult in the language specific test. When constructing the language test, I had taken pains to make sure that the types of sentences which the students were required to recognise here were based very closely on text-book materials. I had also ensured that the sentences used were very similar in both languages, as can be seen in the test pages at Appendices 7 and 8. However, it could also be that students of

German have greater exposure to the metalanguage – as a teacher of both French and German, I am aware that words such as *noun, verb, adjective, subject, object* and so on are used regularly in my German classes, but do not feature as frequently in French classes.

As previously mentioned in his study of the relative difficulty of learning different languages for the native English speaker, James highlights the differences in phonology as being more difficult in French than in German, it is interesting to note that in Part 1 of the language test, the French students performed better. Again in Part 2 of the language test, the German students performed better when dealing with a grammatical aspect, whereas James sees grammatical aspects of German as being more difficult than French. In Part 3, where students had to identify rhyming words, the closer proximity of German spelling to English, and the greater distance between French and English spelling may in some ways account for the higher achievements of German students.

The closest convergence in the language test appears in Part 4, where there was no significant difference between the ability to learn new words in either French or German.

Although there are significant differences between performance in the two languages, there was no significant difference in either language when analysed by gender, with both boys and girls achieving similar results in each part of the test.

Tables 12 and 13 below show how students performed in the different component parts of the test, whether they participated in the German or French tests. The analysis is compared by gender.

Table 12 Analysis of component parts of the German Language test, by gender

	part 1		part 2		part 3		part 4	
overall ave %	91.25		67.57		67.37		83.09	
test	Male	Female	Male	Female	Male	Female	Male	Female
test ave %	90.7	91.6	65.6	68.9	68	67	79.9	85.3
test number	34	50	34	50	34	50	34	50
test ave diff	0.9		3.3		1.0		5.4	
number diff	16		16		16		16	
variance	60.81	226.98	370.17	367.99	179	286.28	224.98	188.17
T test	0.32		0.76		0.28		1.68	
Degrees of freedom	82		82		82		82	
sig	not		not		not		not	

Table 13 Analysis of component parts of the French Language test, by gender

	part 1		part 2		part 3		part 4	
overall ave %	97.85		52.4		49.79		81.77	
test	Male	Female	Male	Female	Male	Female	Male	Female
test ave %	96.5	99	54.6	50.5	48.8	50.6	82.9	80.8
test number	36	43	36	43	36	43	36	43
test ave diff	2.5		4.1		1.8		2.1	
number diff	7		7		7		7	
variance	109.74	7.81	384.3	263.45	204.53	97.48	297.68	301.11
T test	1.48		1.00		0.65		0.53	
Degrees of freedom	77		77		77		77	
sig	not		not		not		not	

This is a significant aspect of the research. Up to this point, there has been no significant difference between boys' and girls' results in an English language based aptitude test, or in a language specific aptitude test. Boys and girls have performed to similar degrees in both sets of tests, and in each of the component parts of the test. At this stage, the only difference in the

sample occurs in the language itself, and not in the gender of the participants.

7.4 Teacher Assessment

So far, my research has centred on specific testing of students, using measuring points outside the curriculum, however, at this point it would be useful to look at the assessments made by teachers of their students over the past three years, forming a short, but introductory longitudinal study of progress made. Again, the focus has two angles: the differences between boys and girls achievements, and the differences in achievement in two languages. At various points during the year, teachers are asked to assess the National Curriculum Level students have reached. The students in this study entered year 7 with no prior knowledge of any Modern Foreign Language, and were assigned to either a French or German class at random. Half of each year's intake was therefore assigned to French classes, and half to German classes, with broad range of abilities in each half of the year. In Table 14, I have shown the teacher assessments made twice yearly. These are based only on the teachers' judgement of classroom based activities, and do not include summative assessments, such as exams.

Table 14 Teacher Assessments of Year 9 Students over the past 3 years

	Yr 7 1	Yr 7 2	Yr 8 1	Yr 8 2	Yr 9 1	Yr 9 2
French	2.66	3.31	3.56	4.56	3.75	4.38
German	2.76	3.28	3.83	4.46	4.00	4.83
French Boys	2.1	2.8	2.8	3.6	3.4	3.9
French Girls	2.75	3.38	3.74	4.75	3.97	4.52
German Boys	2.7	3.3	3.9	4.6	3.9	4.8
German Girls	2.7	3.2	3.8	4.4	4.1	4.9
All Boys	2.6	3.3	3.6	4.4	3.7	4.5
All Girls	2.7	3.3	3.8	4.6	4	4.7

The measurements used in this table are taken from the mean National Curriculum levels achieved by a single year group of 240 students, when tracked over a three year period, and represent two reporting cycles per year.

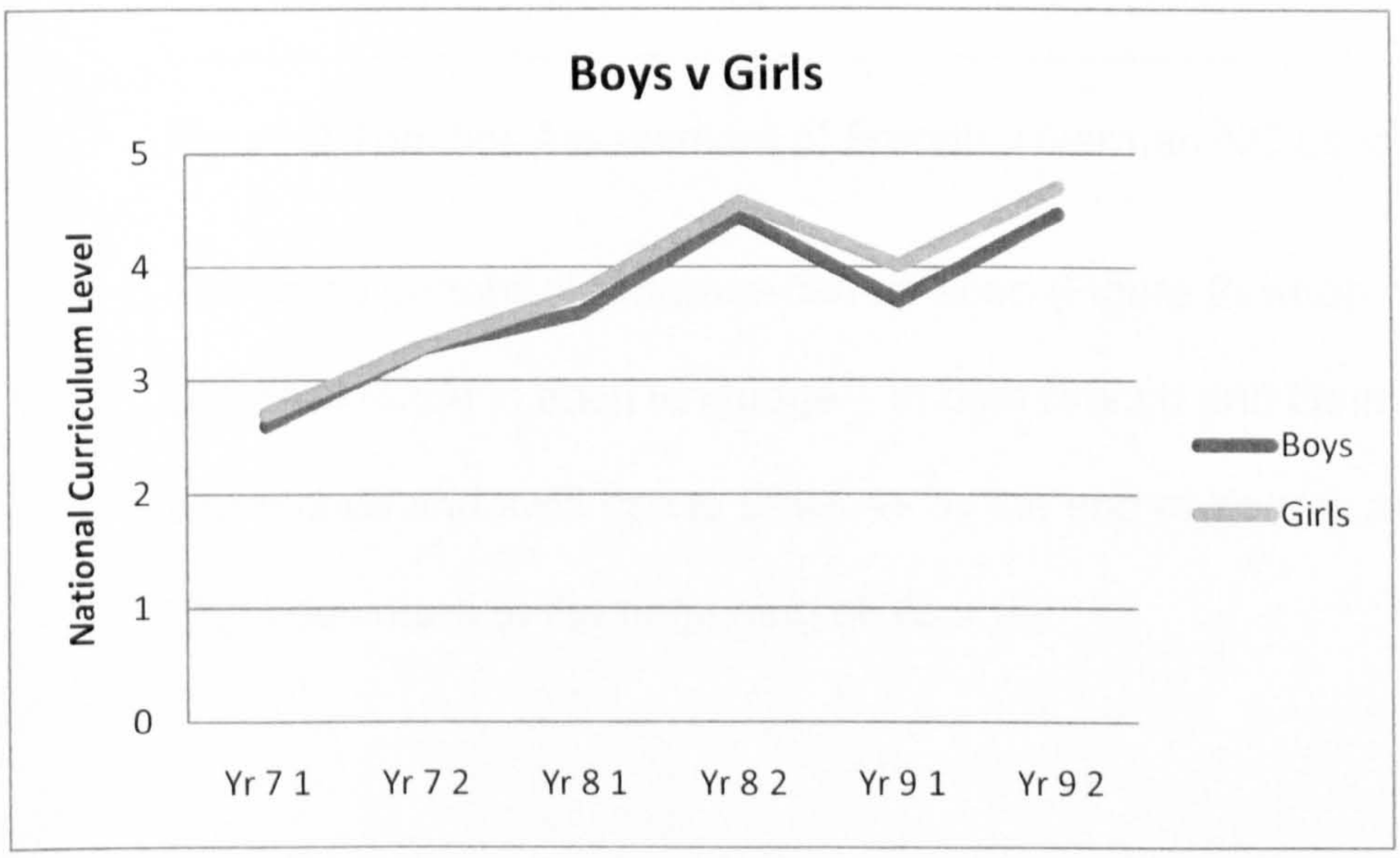

Figure 1 Teacher assessment of Boys v Girls NC Levels years 7-9

In Figure 1 we can see the progress made over three years by boys and girls, regardless of language. As can be seen, there is very little difference between the progress made by boys and that made by girls. Both follow a similar pattern, which includes a similar drop as the students enter Year 9. Throughout the 3 year period, girls have tended to slightly outperform boys, with the gap between boys and girls performance increasing slightly at the beginning of Year 9.

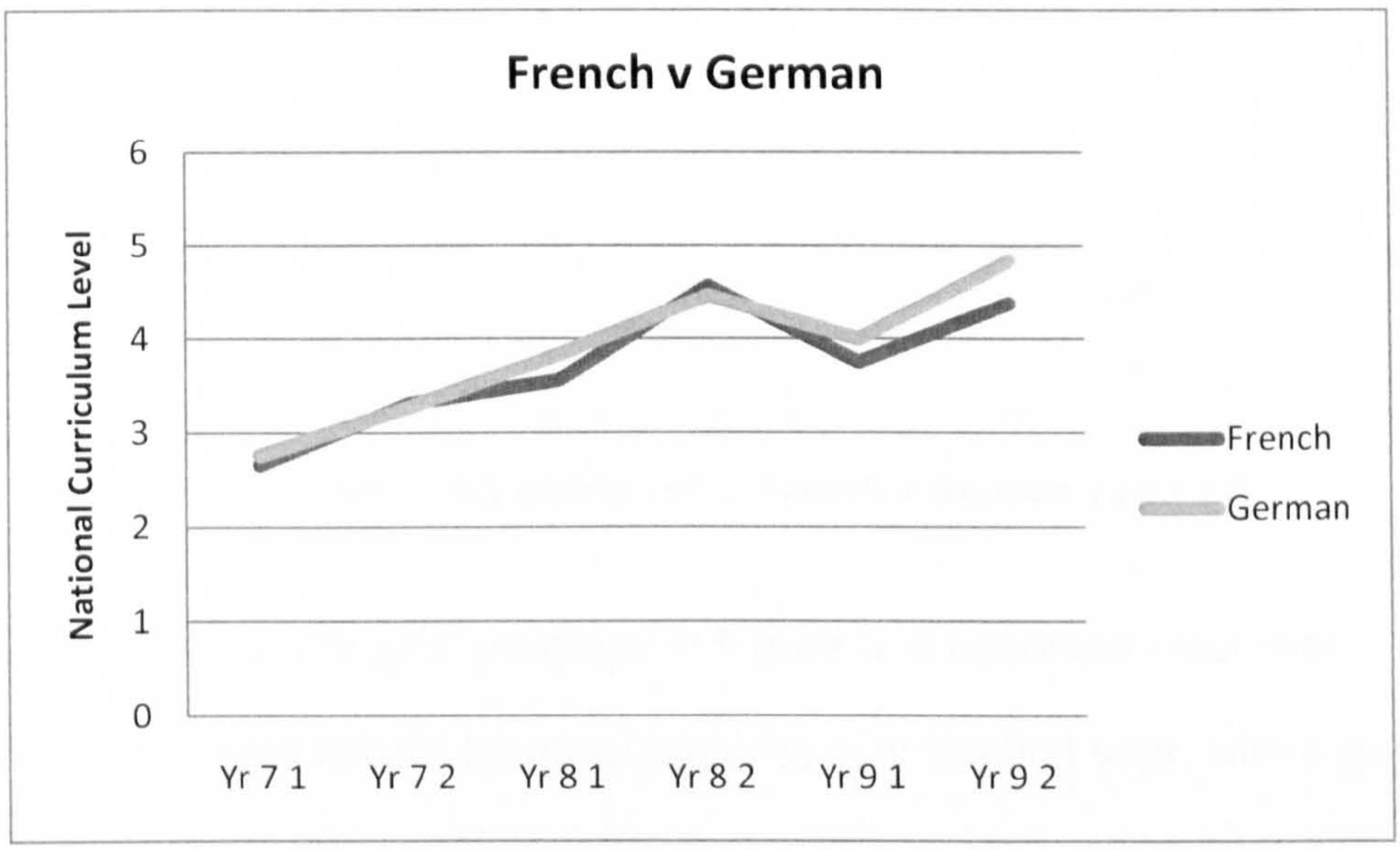

Figure **2** Teacher Assessment of French v German NC Levels years 7-9

The same pattern of progress can be seen (Figure 2) when comparing the progress made in each language – in both French and German, students experience and swift rise to Level 4+ by the end of Year 8, and experience a slight downturn at the beginning of Year 9.

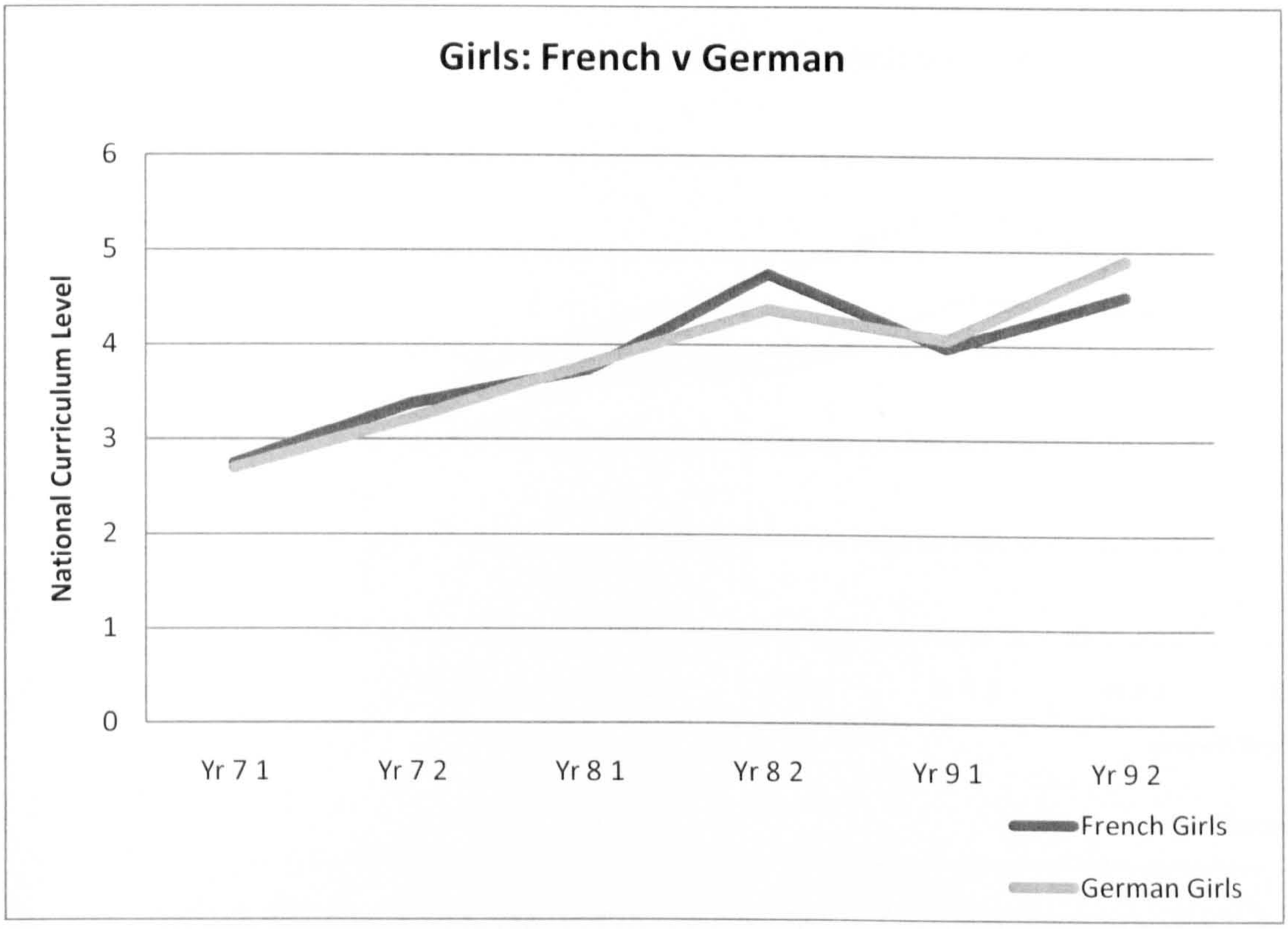

Figure 3 Teacher Assessment of NC levels: Girls: French v German years 7-9

When looking only at the girls' progress in Figure 3, it becomes clear that initial progress follows almost identical patterns over the first year, with a gap beginning to show in the second half of Year 8. In this case, those girls learning French began to make speedier progress, but were overtaken a year later by the girls learning German.

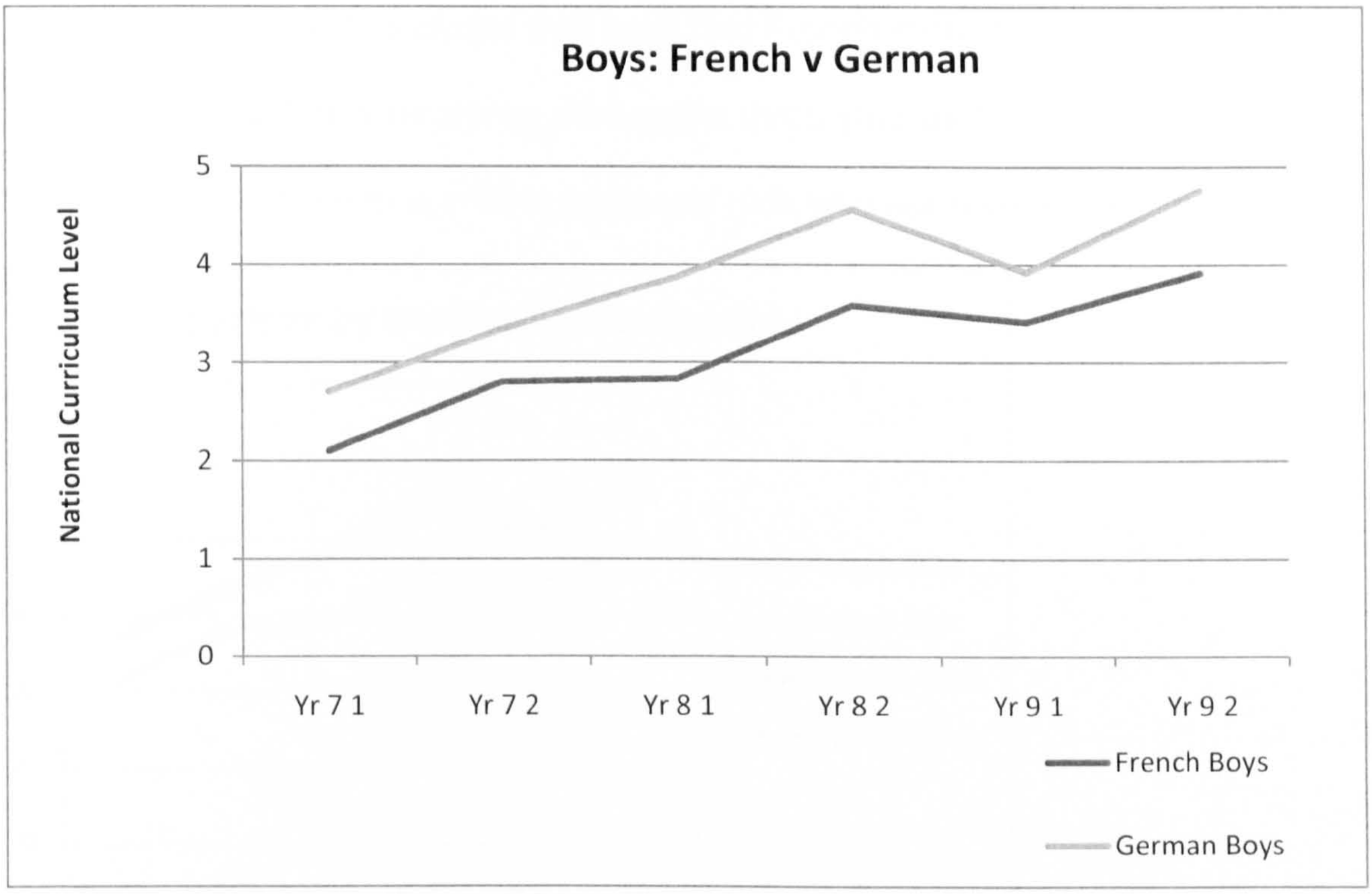

Figure 4 Teacher Assessment of NC Levels: Boys: French v German years 7-9

However, as can be seen in Figure 4, most interesting is that the boys who were assigned to the German classes initially made much speedier progress. In their initial assessment, in Year 7, the boys learning German were already half a level ahead of their counterparts in the French classes, and maintained this difference, or exceeded it throughout the three years. The boys' progress in German appears to have been more consistent throughout Years 7 and 8, and, although they experienced a greater drop at the beginning of Year 9, their progress by the second half of year 9 was averaging at one National Curriculum Level higher than their counterparts in the French classes. When looking at the Teacher Assessments for both boys and girls, and for French and German, as can be seen in Figure 5, it can be seen clearly that the boys learning French have remained consistently around a half a NC Level below their female counterparts in French, as well as below both boys and girls in

German. This would appear to indicate that boys find French more difficult, as there is a greater level of consistency across the three year period between girls who learn French and both boys and girls who learn German.

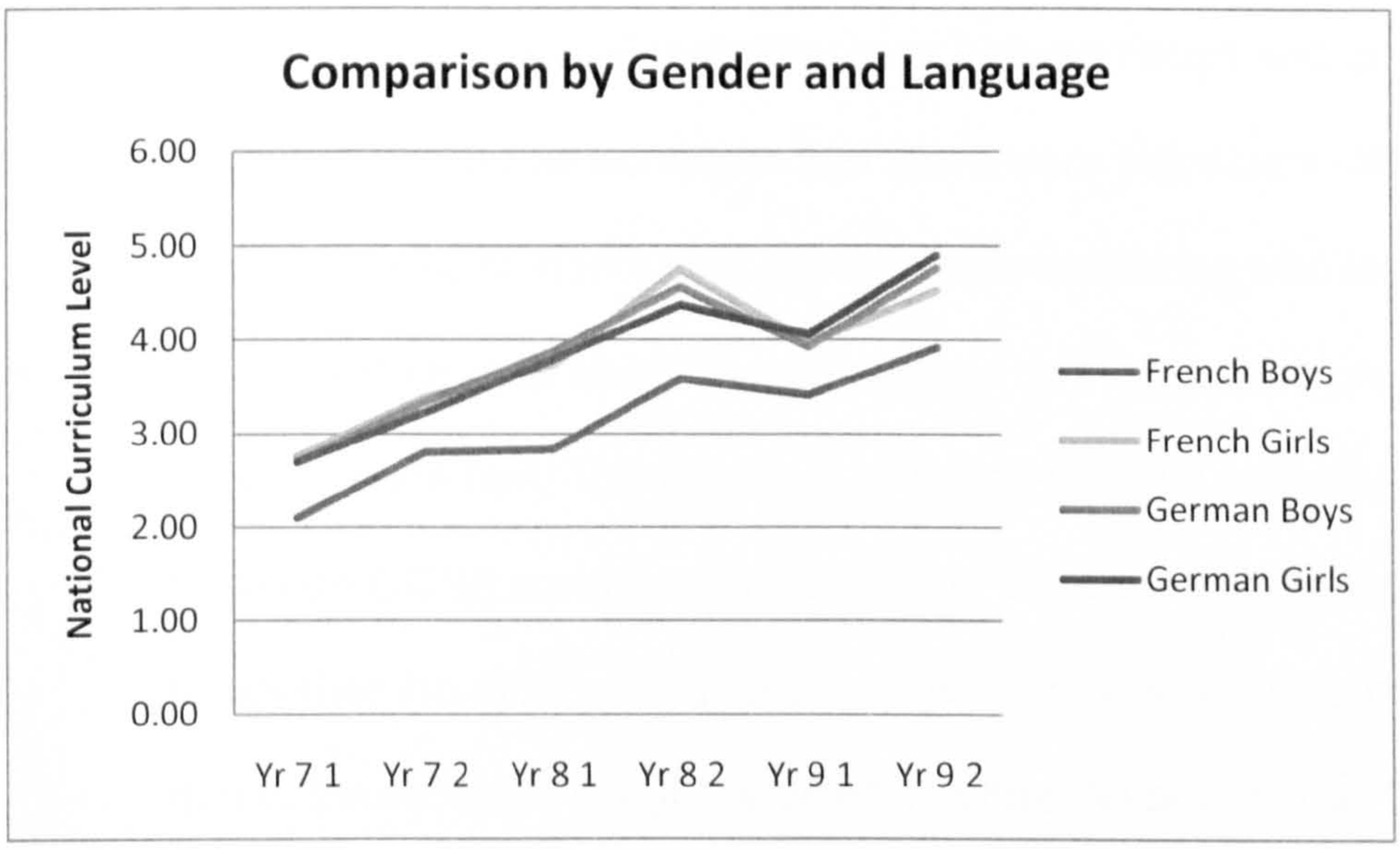

Figure 5 Teacher Assessment of NC Levels: Comparing boys and girls, and French and German

When looking at this information, it must be borne in mind that the NC levels were based solely on assessment of a range of tasks completed in class, by individual teachers with no standardised assessments. There may, therefore, be a number of reasons for the differences between boys and girls, and between French and German. To determine whether there is a significant difference between the performance of boys in French and German, I have now begun a more formal tracking system of achievement of year 7 students, based on summative assessments, such as end of unit tests, based on text book materials, which will take place at set times throughout the year, and the more flexible Asset Languages assessments. However, it will not be possible to include these results in the current study.

7.5 Discussion of MLAT-E results

From my research the MLAT-E has shown no significant difference between the aptitude of boys and girls, and the language specific test also demonstrated no significant difference between boys and girls. However, the language test did demonstrate that there were significant differences between those students who learn French and those who learn German, with a greater degree of success experienced by the German groups in certain aspects of the test. This does not tally with national statistics, which are based on GCSE results achieved at age 16, and so the question remains as to whether the difference between boys' and girls' achievement at GCSE is due to the increase in age, or whether other developmental factors come into play as the students mature. It could be argued from the evidence presented from my research, that there is very little difference between the achievements of boys and girls, and between their overall achievement in either French or German, but it must be noted that the research participants in this sample are all aged between 12 and 14 years. It would be necessary to repeat these tests with students of different age ranges in order to determine whether the differences are age related. In my current school context, sadly I do not have access to a large enough number of older students to assess whether gender differences emerge due to increasing age, however, would welcome the opportunity to study this matter further.

7.6 Teaching and Observation

Following on from the initial study, which involved observing only one class of students who were learning German, for the main research I needed to extend this to incorporate a wider range of students. The students involved in the initial study were all drawn from Fast track classes, in other words, the highest ability range within the year group. Although this had certain advantages, in that the students had completed a larger part of the curriculum, and were able to extend much of their learning, and as a result were more able to discuss their perception of their learning, the number of students available in this ability range was quite small, when compared to the size of the whole year group. The students involved in the initial study had been drawn from my own class, and had become active participants in the research, rather than merely 'subjects' As such, they had more opportunities to build reflection into their learning. This may be more difficult with students who are not so able to use the vocabulary of metalanguage in the main study. For the initial study, I had been in a position where I could split this one class into two sections, and deliver the material to the class in two halves – one by inductive and the other by deductive teaching styles. This would not have been possible with a larger sample of students, as timetabling constraints and the cooperation of colleagues would have been stretched to the limit in order to accommodate the number of lessons required. For the main research, I therefore decided to use two mixed ability classes in each language. Each class contained a range of abilities, and a similar mix of boys and girls. Therefore, for this phase of my research I was

able to extend this to include a broader range of students, selected from 2 classes, each of French and German students, making a total of 4 classes. As I explained earlier the use of tenses is a key turning point in language learning, with both the National Curriculum and GCSE assessment criteria identifying the ability to talk about past and future events as the key element to achieving NC Level 6 and GCSE grade C respectively, whereas the ability to use either past or future tenses is the indicator for NC Level 5. The use of tenses therefore, is identified as a key tool in accessing higher levels of achievement, and those higher levels of achievement are precisely the ones on which the students are compared, as national statistical data can be obtained for students at those levels.

I had initially planned to undertake this observation task using the Perfect Tense, but on reflection, I changed the format of the observation task to include the Simple Future Tense. This was due to a variety of reasons, and after consideration of the parity of the two structures as well as the availability of coursework material. In order to be able to compare like with like, I felt it was important that a single structure be found which had the greatest points of similarity in both languages. In both French and German, formation of the perfect tense requires and understanding of pronouns, auxiliary verbs *(avoir/être* or *haben/sein*) and a range of past participles. Where French has a clearly defined list of verbs which take *être*, German does not. Where German has a clear list of weak and strong verbs, from which past participles can be easily identified, in French, the students would need to be aware of the patterns used to form past participles of –er, -re, and

–ir verbs, as well as being able to identify the past participles of irregular verbs from a prepared list. My concern was that if I were to observe students' acquisition of the perfect tense, I would have to consider the variables contained in the grammar of the languages themselves, and the difficulties in accessing information. This in turn may have affected the results of the observation, as it may not have been possible to identify where students' results were affected only by the teaching or where the relative variations in access to information had affected the outcomes. In addition to this, on closer inspection of the text books and teaching materials available to the classes, it became apparent that the perfect tense was not treated as a separate aspect of learning, but was gradually introduced over time, with the introduction of certain phrases throughout the teaching materials. This meant that I would not be able to ascertain whether the students had acquired their knowledge only through the observed lesson phase, or were relying on and building on prior knowledge. The Simple Future tense, on the other hand, was not introduced through any available teaching materials, at this stage of the students' learning, and so could be viewed as a tabula rasa. In addition to this, the structure for presenting the Simple Future tense in both languages had more similarities, requiring the understanding of pronouns, auxiliary verbs (*aller* and *werden*) and infinitives, with no irregular verb forms in either language. The only difference between the two languages being that German requires a change in word order. Therefore, after piloting the use of the Simple Future tense in my initial study, I felt that it would be beneficial to retain this when conducting the main research. It must be noted, however, that the National Curriculum Level Descriptors have recently changed, but

still specify that reference to past or future events is a description of Level 5. The National Curriculum Level Descriptors are included in Appendix 1.

For this phase of my research, it was my intention to observe whether there were any differences in the learning and assimilation processes demonstrated by boys and girls. As I have shown from my study of aptitude, not as a predictor of learning, but as a provider of baseline information, there appears to be no significant difference in boys' and girls' aptitude when it comes to learning a foreign language, and so, the logical next step seemed to be to look at teaching styles, to see if these have any bearing on the outcome of learning. As I mentioned earlier, I had chosen to consider the effects of inductive and deductive teaching styles on students. Both of these approaches interest me, as the inductive v deductive argument, which could be loosely associated with the notion of symbol processing v computation seem to me to tie in with the popular notion within education that boys learn by taking things apart, and girls by talking it through. Whereas the inductive and deductive approaches are concerned with a teaching style, processing, through whichever format, is concerned with learning styles. Within the secondary school classroom, it is difficult to determine where teaching ends and learning begins, as the two are often closely intertwined. Whereas I have chosen to consider the differences in teaching style for this research, I must bear in mind that the individual learning style of the students will have an effect on the results of the observation. New material can be delivered to students in various forms, however, to understand which elements have been retained, and whether it has been processed involves an understanding

of the methods by which students are able to "inscribe, sort, store, collate and retrieve this information". (Bruner, 1999, p148).

7.7 Teaching and Observation phase

In the initial study, the only difference which had become obvious between male and female participants was in the observation phase of the research, where girls scored significantly higher than boys in a gap fill test in German. For the main research phase, I repeated the observation phase of my research with groups of students who are learning either French or German, with the aim of demonstrating whether the difference between boys' and girls' achievement in the gap fill test was an anomaly, or whether, with a larger group the differences will become less clearly defined.

Whereas in the Initial study, I was only able to conduct the observation exercise with students who learn German, for this main research, I conducted this study with students of both French and German. I arranged to observe two classes, each of French and German. Both classes have a similar range of mixed ability, and a similar range of male and female students. For the purposes of this observation, the students were taught in their normal classroom, to create a learning environment which is more natural for the students. All classes received instruction in the future tense, using *werden* in German, and using the simple future with *aller* in French. Teaching materials were prepared using as far as possible a range of vocabulary which was not gender specific, and were created using similar

structures where possible. These were presented as slide shows to ensure that the images and structures could be repeated in two languages, and in two teaching styles. Samples of these materials can be found at Appendices 15 and 16.

As with the Initial study, students were exposed to either Inductive or Deductive teaching styles, and were given a series of assessments to work on in groups and alone to ascertain how much information they managed to understand, reproduce and retain. Inductive learning involves the process of *learning by example* -- where a system tries to induce a general rule from a set of observed instances. The Inductive groups were given a series of examples of sentences using the simple future format. After seeing a series of examples, they were required to reproduce sentences and collaborate to produce a piece of text from a picture stimulus. The results of these activities should then allow me to determine whether this sample of students has been able to discover patterns, draw conclusions, and provide an explanation of how the sentences are constructed. The Deductive groups, on the other hand, were presented with the basic principles of sentence construction, and were expected to create examples from these principles. Again, a picture stimulus will provide a vehicle for the students to create and give examples of sentence construction.

A week after the classes have been exposed to their instruction, post-testing was conducted, to determine whether they are able to use the information they have been given to construct their own sentences, again, using a

picture stimulus. Following the observation tasks, as with the Initial study, I was able to conduct individual interviews with a small selection of students to determine whether they were able to explain the processes they have experienced, and to determine whether the students who have been exposed to a deductive process are able to provide further examples to demonstrate their learning, and whether the inductive group are able to draw conclusions and express a rule to explain the processes to which they have been exposed.

I have outlined below the lesson plans for the two tranches of observation, with the inductive and deductive groups:

Table 15 Lesson Structure – Observation task

Deductive group	Inductive group
Group work carried out in single-sex groups	
Preparation: Structure of pronouns Ensure students are aware of the pronouns and pictures representing each pronoun. Display pronoun pictures on the wall. Arrange seating plan – groups of 4 – boys/girls. Provide copy of seating plan for AT	Preparation: Structure of pronouns Ensure students are aware of the pronouns and pictures representing each pronoun. Display pronoun pictures on the wall. Arrange seating plan – groups of 4 – boys/girls. Provide copy of seating plan for AT
Lesson 1 15 Minutes explanation: structure of *werden/aller;* distribution and explanation of reference sheets; 20 sample pictures rules of word order.	Lesson 1 15 Minutes explanation: examples of werden/aller; broader selection of sample sentences, initially using one verb to consolidate structure, but gradually incorporating a wider range of verbs; 40 sample pictures and sentences; ask students to identify any patterns that they see in the sentence structure.
8 Minutes: group work - word order Tape recorders set up for 4 groups	8 Minutes: group work - word order Tape recorders set up for 4 groups

8 Minutes: cloze test to be completed individually Tape recorders set up for 4 groups	8 Minutes: cloze test to be completed individually Tape recorders set up for 4 groups
15 Minutes: group work - picture narrative. Run verb hints (short task) slides on Interactive White Board Tape recorders set up for 4 groups	15 Minutes: group work - picture narrative. Run verb hints (short task) slides on Interactive White Board Tape recorders set up for 4 groups
5 Minutes: plenary – ask: give me examples of your own of the use of future.	5 Minutes: plenary – ask: how do you form the future?
Lesson 2 – Post-testing	
10 Minutes: question and answer session identifying pictures 10 Minutes: explanation of picture narrative task, question and answer session to elicit possible responses for each picture. Use verb hints slides. 20 Minutes: picture narrative, working individually, with access to reference materials from previous lessons only. Run verb hints on Interactive White Board.	

Table 16 Materials Used in Observation Phase:

Deductive group	Inductive group
Seating plans	Seating plans
Pronouns.ppt and wall displays	Pronouns.ppt and wall displays
book.ppt	book.ppt
reference sheets – rules, and common verbs	
20 pictures.ppt	40 pictures.ppt
word order test	word order test
cloze test	cloze test
robot sample pics.ppt	robot sample pics.ppt
robot sample pics printed	robot sample pics printed
full selection of pics.ppt	
robot picture narrative exercise.	robot picture narrative exercise.

For this phase of the research, I had 4 classes to work with. By choosing mixed ability classes, I was able to ensure that each class had a similar ability range, which had been demonstrated in the aptitude testing, and through teacher assessments. Students had demonstrated a range of National Curriculum levels from 2-5. All classes contained a similar mix of boys and girls. I intended to deliver the same material to each class, but using either a deductive or inductive teaching style, and using the same materials.

In total, 110 students took part in the observation phase of my research. This was made up of 50 boys and 60 girls. Of these students, 54 learn German,

and 56 learn French. In order to aim for a parity of performance, the results of each aspect of the various assessments have been calculated using the average performance of each grouping. The groups were made up as follows:

Table 17 Number of boys and girls in each group.

Group and Gender	Number
French Deductive Boys	13
French Deductive Girls	17
French Inductive Boys	11
French Inductive Girls	15
German Deductive Boys	13
German Deductive Girls	13
German Inductive Boys	13
German Inductive Girls	15

Each class received 20 minutes instruction in the use of the Future tense. The German deductive group was presented with a grid, showing the required word order, with columns entitled subject, verb (*werden*), object, verb infinitive. They were also given a table with the verb '*werden*' fully declined. The French deductive group was also presented with a similar grid, with columns entitled subject, verb (*aller*) infinitive and object. The materials used in class can be found at Appendices 13 and 14. Students were also given a table with the verb *'aller'* fully declined. The deductive groups were allowed access to these materials at all times during the instruction, and subsequent assessments. The inductive groups, on the other hand, were presented with a series of examples of the Future tense in use. Initially, they

were shown pictures showing future actions, with captions describing the action. The inductive groups were then given pictures with the verb infinitive missing, and then with both the infinitive and the correct part of the verbs '*werden*' or '*aller*' missing. These groups were initially asked to complete the missing sentences orally, during a question and answer session during the lesson , and then, like the first group, were presented with a written task. All of the instruction sessions were audio taped.

Immediately after receiving their initial instruction, both the deductive and inductive groups were given a written activity, to be carried out in small groups. The deductive and inductive classes were split into smaller groups, each with three or four students, to complete a series of activities collaboratively. One significant change from the initial study was that these small groups were gender specific. The smaller size of the sample in the initial study did not allow for measurement of the differences between gender specific groups in the observation task, but, in addition to this, one purpose of the initial study had been to assess the viability of the task – to see whether or not the mechanics of teaching the same subject matter in two distinct ways, as well as the management of the group based activities, was feasible.

The first task was in the form of a gap fill test, with parts of the verb *werden or aller* and the infinitive of the verb missing. Exemplars of these worksheets can be found in Appendices 13 and 14. There were 40 questions in all, and a time limit of 8 minutes was set for the completion of the tasks, although the

participants were told that they did not have to complete all the questions in the time allowed. Students completed their own sheets, but were encouraged to discuss with their groups what actions they were taking to complete the task. Four of the small groups in each of the deductive and inductive sessions were audio taped, and later transcribed.

The second activity consisted of sentences where the words had been jumbled up, with the purpose of seeing how the group could work together to put the words in the correct order. Again, 8 minutes was allotted for this activity, and the groups were encouraged to talk through their progress.

The third task, which was again carried out in small groups, and again with audiotapes being made, involved a picture narrative. By this stage, regardless of teaching strategy, all participants had accessed instruction into the use of pronouns, the use of the verb *werden* or *aller*, and the forms of word order required to construct sentences, so this final activity provided a more open task, with the view of drawing together the previous strands into constructing sentences with a concrete purpose – that of describing events in the day of a robot. Each group was provided with a set of four pictures depicting familiar scenes, and annotated with some helpful phrases. The tasks revolved around the daily routine of a robot, and were laid out in a style familiar to students. Students were required to give four pieces of information for each picture. As well as the help phrases, students could glean information for inclusion from the pictures themselves, such as the time activities took place, from the picture of the clock on the wall. 12 minutes was allowed for the completion of this activity.

After each lesson, a discussion was held, in the form of a plenary, where participants were able to ask and answer questions about the lesson. This is a standard approach to lessons at the school, where students discuss briefly what they have experienced during the lesson, and where they hope it will lead them when preparing for subsequent lessons. A sample transcript of a plenary discussion with one of the groups can be found at Appendix 18.

Two days later, each group was presented with two post-testing activities. The first was a simple question and answer activity, often used at the as a starter activity at the beginning of a lesson. As with the Initial study, a selection of 40 images was screened, and students had to give the correct sentence for each image. Whereas in the Initial study, students were required to raise their hand and give their answers orally, I felt that this might affect the way questions were answered – in that, those students who were more able would provide an exemplar answer. This activity was not designed to determine whether students could remember each phrase, but whether they could identify the correct structure. The second phase of the post-testing involved an extension of the previous picture narrative activity. This time, the students had ten pictures to describe in 30 minutes. Both of these activities were intended to be used as a tool to assess how much information the students had retained from their previous lessons, and how much they were able to reproduce individually.

7.8 The results

There were, in total, 5 phases of assessment:

the gap fill test

the word order task

the picture narrative (small group activity)

the question and answer session

the picture narrative (individual activity)

It was important to explain to all participants that the 'tests' were being conducted for the purposes of research, and would not have any direct bearing on their progress in class. Students in each group were interested in the research, as they were all keen to prove that girls were better than boys or vice versa.

As with the initial study, the activities created for this task are 'stand-alone', meaning that they can be used at any point in the school year without being tied to a specific topic area, or a specific text book. This gave me greater flexibility when deciding at what point in the school year the observation tasks could be carried out, and also allows for further research to be carried out either in my own school, or in other institutions.

7.9 Outcome of the tasks

I used the same assessment procedures for the main research as explained earlier in the initial study. The gap fill and word order tasks, although

conducted as a small group activity, where students worked in groups of three or four.

Table 18 Results of Gap fill and Word Order Assessments

Group	Gap fill / 40	Word Order /20
French Deductive Boys	17.09	10.76
French Deductive Girls	21	12.76
French Inductive Boys	16.2	9.81
French Inductive Girls	16.25	13.25
German Deductive Boys	23	11.6
German Deductive Girls	22	12.94
German Inductive Boys	17.38	12.23
German Inductive Girls	17.42	13.64

The gap fill test

As expected, in the gap fill test, the deductive group performed significantly better than the inductive group. The deductive group had access to a range of reference materials, including an explanation of the structure of *werden* or *aller*, a list of personal pronouns, and a list of common verbs and their meanings. Not only did the deductive groups manage to write more answers correctly, they also attempted a greater number of questions.

Word Order

This task was carried out as a group activity, and the groups were encouraged to talk through their processes as they worked. Table 18 shows the mean results for each of the groups, and indicates that the inductive group scored more highly than the deductive group. Whereas in the first task, the information which was required to be completed tied in closely with the layout of the reference sheets, in the word order task, students were required to focus on the examples that had been given to them. In this case, the inductive groups, who had been exposed to a wider variety of examples of correctly constructed sentences, scored more highly than the deductive groups, who had to apply theoretical knowledge to practical situation.

As with the initial study, the "rumble factor" can be used as a means of detecting the level of off-task behaviour, which often occurs when children face a difficult task, or have completed their tasks. And again, as with the initial study, the deductive groups displayed more off-task behaviour in this particular task than in earlier tasks. It would be difficult, and beyond the remit of this study, to measure accurately the amount of off task activity demonstrated by each group, however, it would be interesting to investigate this matter further in the future. Again, as with the initial study, the inductive groups, appeared to find all the group tasks difficult. Tape transcripts, and the audiotapes themselves provide evidence of the higher level of off-task behaviour exhibited by the inductive groups, in both French and German and both required more instances of teacher intervention to ensure the tasks were completed.

It was interesting to note that in the deductive groups, with access to a variety of reference materials, the participants were able to complete the tasks with little discussion. The majority of the groups got on with the tasks as set, and used the reference sheets to check their answers.

Girl 2: This is really hard!

AT: why is it really hard?

Girl 2: cause I know what to do but I can't say them.

Even though this was a writing activity, there was still concern among the group that pronunciation would affect the results – bear in mind that this group had only used oral examples whereas the deductive groups had access to the written examples of the sentence structures and various component parts.

Some of the inductive girls were able to use their knowledge to work out what was happening. In this case, it was clear that one member of the group understood exactly what to do, but had to explain it to the others:

(French inductive girls Group 1)

Girl 4: so we start here with *je*, and what comes after *je*?

Girl 8: *jouer*

Girl 4: No. It is not *jouer*..It can't be, because it has to be a 'v' word – they all had 'v' words.

Girl 12: *vais*!

Girl 4: Yeah, *vais*

Girl 8: I thought it was that, but it wasn't in there

Girl 4: *Jouer* goes in the second bit – you know, like *je vais jouer* – look here, in the second part

Girl 12: And then...what is the other bit that is missing?

Girl 4: The *vais*

Girl 12: so we get *je..vais*! yayy that is right!

Later on, that group had clearly managed to understand, and just got on with the sentences, albeit with one student taking the lead. Once they had understood what they were doing, they just carried on working.

Girl 4: *il vas*...

Girl 8: is it *vas*?

Girl 4: ...*manger*

Girl 8: alright

Girl 4: nous allons, aller

Girl 12: nous.. allons aller.. Paris

Girl 4: vous allez.. vous allez... regarder

The word order task, at first sight, may have been more problematic for the students of German than for those of French, as two tasks were involved – identifying the correct part of the auxiliary verb (*werden/aller)* as well as dealing with the unfamiliar movement of the infinitive to the end of the sentence – a feature which does not occur in English, the students' mother

tongue, nor in French. However, despite this, the participants in both languages tackled this task with greater confidence than the gap fill task, with the audio taped evidence demonstrating a greater degree of on task activity for both boys and girls, as well as a greater degree of discussion about the nature of the sentence structure.

(German deductive girls, group 2)

Girl 1: sie werden nach Southend fahren

Girl 2: wait that's a question – so that's the other way round

Girl 1: Southend nach fahren?

Girl 2: no it goes *werden sie*...

Girl 3: so it would be *werden sie*, yeah?

Girl 1: *werden sie Southend* .. right? yeah?

Girl 2: yeah.. but we ain't put that.... oh. it would be *sie nach*

Girl 3: oh.. I dunno.. what does that mean? I'd swear it means quarter past

Girl 1: I think werden sie nach Southend fahren

Girl 2: so that is.. no werden sie Southend nach fahren

Girl 3: right

Girl 2: we all happy with that, yeah?

All: yeah

The girls recognised that this was a question, and therefore did not follow the same pattern as the original examples. Although they had access to resource materials, they did not use them during this exercise, instead concentrating on the task, and on their knowledge of the structures as they had experienced them to that point.

(German inductive girls, group 1)

Girl 8: I don't know what those two words mean

Girl 6: Teddy bear and *sammeln*

Girl 7: I think it would be *Teddybär sammeln* – cause *Teddybär* is the thing

Girl 6: That's the subject, isn't it – *Teddybär*

Girl 8: is it even a teddy bear?

Girl 7: yeah.. apparently

Girl 6: So it's *sie wird* Teddy *sammeln*.

Girl 8: Ok. What's next?

The Inductive groups had not had any grammatical structures explicitly explained to them during the course of this lesson, but have assimilated their prior knowledge from previous lessons, and have transferred it to this context.

One of the deductive boys groups proved interesting. During the early discussions, the boys had the following conversation:

(Deductive boys German)

Boy 1: why has *Kuchen* got a capital letter and nothing else has?

Boy 2: cause it's the verb – like *Deutschland*

Boy 3: yeah, it's like *Deutschland*

Boy 2: that's what I said

Boy 3: du wirst einen backen Kuchen.

Throughout the remainder of the exercise, two of the boys continued in the belief that words with capital letters are verbs, and, as they knew that verbs must go to the end, they incorrectly put all words with capital letters to the end of the sentence. However, one boy persisted in attempting to change their minds by interjecting comments. It was only when they came across the word: Southend, that they realised that it was not the verb which had a capital letter, but the nouns.

(Deductive boys German)

Boy 1: no, seriously it's *nach Southend fahren*

Boy 2: But the verb goes to the end

Boy 1: Southend isn't a verb , it's a place!

Boy 2: Oh! So we got those ones wrong then. I'll just change it round a bit...

The French groups, although they discussed the task, did not use explicit grammar terms – they referred to 'this word' or 'that word' rather than using

the terms verb or noun. Whereas the German classes are used to using grammatical descriptors in class, the French classes do not seem to be as familiar with the terms or their usage, but from their discussions and from the results of their tasks, they appear to be as familiar with the usage of the actual words.

The Picture Narrative – group task

This task involved using the newly acquired skills in the Future tense to construct sentences using a range of familiar and unfamiliar vocabulary. This task appeared to be more challenging for all the students and the amount of off task activity increased within all groups. Regardless of the language or the teaching style, the students still referred to the activities in the past tense - he did, he went, etc, when the entire focus is the future tense. Despite this, all groups managed to complete some of the task, although whether they understood that they were discussing a range of activities which will happen as opposed to which had happened, is unclear.

7.10 Post-testing

The second lesson in the observation phase involved assessing in two formats, how much information the students had understood. During the first of two tests, the class were asked to identify correct sentences from a range of 40 pictures. In the initial research, I had asked the students to raise their hands and kept a tally of how many questions were answered correctly by boys and girls, however, in order to give both boys and girls equal access to

answering all questions, I had revised this format so that the students could write down the answers.

Table 19 Results of Question and Answer session in post-testing, out of a maximum of 40 questions.

French Deductive	32.5
French Inductive	30.5
Total French	31.5
German Deductive	33
German Inductive	29
Total German	31
Deductive	32.75
Inductive	29.75

These show an opposite result to the Initial study, which consisted of only one class, and where the Question and Answer activity was conducted as an oral exercise. By giving the students the opportunity to write their answers down, and to work collaboratively in small groups consisting of boys or girls, both the French and German classes show a similar ability to recall and repeat the future tense structures. When looking at the results from the perspective of teaching exposure, the deductive groups scored slightly more highly than the inductive, regardless of whether they were learning French or German, and, in contrast to the Language specific aptitude test, there was very little difference between the results achieved between the two languages.

The second phase of the post testing involved students completing a further picture narrative. The pictures were an extension of their original task during lesson 1, which was conducted as a group activity, however, with an additional set of pictures to describe the activities of an entire day. Students were allowed to use their dictionaries for this task, as they are accustomed to using available resources in class activities. There was, however, little significance between the performance of the inductive and deductive groups in this task. The answers were marked on the basis of the number of correct sentences each student managed to produce. Even though the deductive group had not been able to remember the Future tense structure for an earlier exercise in class, when able to use reference materials again, they scored as highly as the inductive group.

Table 20 Picture Narrative Task indicating the number of correct sentences produced.

French Deductive Boys	9.45
French Deductive Girls	10.11
French Inductive Boys	10.8
French Inductive Girls	10.18
German Deductive Boys	10.6
German Deductive Girls	13
German Inductive Boys	10.39
German Inductive Girls	10.5

As with the vocabulary learning section of the Language specific test, there was very little difference between boys and girls when it came to the acquisition of new words. But this picture narrative test was designed to demonstrate whether students could construct novel sentences based on a visual prompt, and then join these sentences together to form a longer

passage. This kind of task is, at a simplistic level, closer to the tasks required at GCSE, in that it requires students to join sentences together in a coherent and meaningful way, which is where the differences between boys and girls become more apparent. In the Picture Narrative task, whereas the girls performed slightly better than the boys, regardless of language and whether they had been exposed to an inductive or deductive teaching style, the gaps between performance of the Deductive girls in German when compared with their male counterparts is most significant. Similarly, in the Word Order, and Gap Fill tasks, the girls demonstrated a slightly increased performance compared with the boys.

At the end of this stage, I conducted a general class discussion, or plenary, with each of the groups to explain the process, and to elicit opinions from each class. Students are familiar with this style of plenary discussion as an integral part of lesson structure, and therefore were able to share their views in the final few minutes of the exercise. These discussions were audio taped. As a teacher, rather than as a researcher, I felt that this was necessary, to allow the students to reflect on their learning processes, and to make their own comparisons with the way they feel they learn best. A transcript of one of these lesson plenary discussions can be found at Appendix 18.

With all 4 groups, the discussion focussed on whether the class felt that boys and girls had different experiences of learning an MFL in school. Naturally, from the year 8 students' point of view, this was translated into whether boys are *better* than girls, or vice versa. All four groups concluded that girls were

better than boys at learning a language in school, with the majority attributing this to behaviour rather than ability.

AT:	What about the test we did yesterday? the gap filling one, and then the word order one? Who do you think did better in that?
Luke:	the girls
AT:	why do you think the girls, Luke?
Luke:	the boys were messing around
AT:	yes, the boys were messing around a lot. Now, the girls, why do you think the girls did better?
David	They took it more seriously
AT:	do you think that that is an issue in class? Do the girls. cause some of you said yesterday when we started off, some of you put your hand up to say that the girls do better than the boys, do you ...
David	everyone put their hand up to say the girls do better than the boys
AT:	why did everyone put their hand up to say the girls do better than the boys?
	various shouting out

AT:	Hang on a minute, we are not going to shout out – Kelly:
Kelly:	Cause the girls pay attention and the boys just muck around
AT:	"cause the girls pay attention and the boys just muck around" – is that a good reason?
boys:	and the reason why we knew the girls were going to do better is that the boys just muck around
boy:	and some people are quite naughty in class.

It is interesting that all four groups recognised that behaviour was the main reason for the differences in achievement between boys and girls, however, the class recognised that boys do play an active part in lessons:

AT:	Do you remember – the very first activity we did yesterday, where I had all those pictures and I was asking you to put your hand up – who was putting their hands up – the boys or the girls?
chorus:	boys boys boys
AT:	it was the boys that put their hands up, and

it as only when it was when we were on about slide 14 that Melanie put her hand up, and then some of the girls started putting their hands up... yes, and Georgia as well.. but.. it is mostly the boys – and again, in all the activities that we do, who puts their hands up first – girls or boys?

chorus: BOYS, boys

AT: the boys – why do they put their hands up first, even though you have just told me that girls do better, so why do boys put their hands up first? Georgia?

Georgia: I think girls get more embarrassed about it, and boys don't really care

AT: so hang on a minute – you say that the girls get more embarrassed, ok. so this is an interesting point, so girls, you get more embarrassed about it, even though you KNOW you know the answer – so what are you getting embarrassed about?

mumble

AT: is it embarrassed that you are going to get things wrong?

Jenny:	about saying it in German.. yeah
AT:	right – do the boys care about their pronunciation? ... cause, do you remember yesterday when they were doing it, I had to correct every single one of their pronunciation – so why is it that boys don't care?
	mumble
AT	Hang on.. Chris:
Chris:	well girls like more writing, but boys like more discussion.

The discussion moved on to why the class felt that the boys preferred to speak rather than write:

AT:	Why do boys not like writing then?
Shane:	it is annoying – boring
AT:	"it is annoying and boring?" what is annoying and boring about it?
Shane:	yeah –well.. you have to actually pick up your pen and write.. but when you are having a discussion you can actually speak, rather than writing loads down.

AT:	Is that because, Danny. that is an interesting point – is that because writing is too slow..?.
Danny:	yeah
AT:	or is it because conversation is more interactive?
chorus	yeah
Danny:	interactive – and well cause writing is so slow

This group identified three main reasons why they perceived boys as not doing as well in MFL lessons: behaviour, risk-taking and dislike of written tasks. There appears to be a prevalent feeling among this and the other groups, that success in language learning must be equated to success in written tasks – the poor behaviour mentioned led the group to believe that girls were more able, even though it was pointed out that the boys were more willing to volunteer information orally. Learning, according to one of the boys, involves having to "actually pick up your pen and write". The range of tasks I had used in this research all involved having to demonstrate knowledge through the written form – in retrospect, the results may have been different if a range of written and oral assessments had been used.

7.11 Interviews

The final aspect of the observation phase of the research was to conduct semi-structured interviews with a range of students to elicit their opinions on their learning processes. I selected 16 students in total – 2 boys and 2 girls

from each of the participant groups, to ensure that a wide range of answers could be elicited from those who had been exposed to the inductive and deductive approaches, and also from both boys and girls. From each group, therefore, I selected 4 students, 2 boys and 2 girls. All students were asked the same questions, enquiring about what they had learned, how they had learned, whether they found the tasks easy or difficult, and what they would do differently in the future. The interviews were then transcribed.

As the purpose of the interview was to elicit in greater detail participants' views on what they had learned and how they had learned it, I arranged to ask the following questions:

- What did you learn?
- Can you describe how you learned it?
- Can you describe what examples you were given to follow?
- How much of the information did understand?
- Were there things that you found difficult?
- Were there things you found easy?
- How confident do you feel now about using the future tense?

Within this semi-structured interview process, some students were able to describe in detail what they had learned and were able to vocalise the processes they had gone through in the series of lessons. Many students find it difficult to talk openly about their strengths and weaknesses, and again, it was crucial that I set made it clear to the participants that my role was not as a teacher, but as a researcher, and that I was interested in their opinions. For this purpose, I chose not to conduct the interviews in my classroom, as this might have created more of a teacher/student relationship.

By the time I conducted the interviews, I had already spoken to the participants, without their normal teachers present, which, again I feel contributed to a more open attitude within the interview. However, it must be added that within the School, students' views are regularly sought for a range of purposes, and so students are within a culture of expressing opinions to members of staff.

The Inductive girls v the Deductive girls

The girls in the Inductive groups had been given a series of examples, and were required to work out whether they could formulate a rule to explain what was happening. Theirs was a discovery, whereas the Deductive girls had been presented with a series of facts, and had to process them in order to formulate accurate sentences.

When asked what they had learned, the girls were able to say that they had learned about the future tense, but described the learning objective in various ways:

> Inductive Girl: We learned like about future and how it was different and if we learned in groups and stuff.
>
> Inductive Girl: Was it to put the *wir werden* in the correct sentences?
>
> Deductive Girl: We done the future tense.
>
> AT: Do you know what the future tense means?
>
> Deductive girl: Yes – it was like what you did, I did, she did and stuff.

She knew that the content involved different verb structures, but confused the meaning of past and future. This has happened regularly throughout the research. It first came to the fore in the initial study, where groups of students were discussing their task, but trying to find the way of expressing what had happened rather than what will happen. This appears to be a confusing concept for students – although many of the students had learned the ideas behind the grammatical terms, like nouns, verb, adjectives and adverbs, the concept of expressing time as a future or past event seems to be outside their sphere of expression. However, further discussion with the students will reveal whether they are able to put the ideas into context, by using the future forms when describing future events. It is worth noting here, that the difficulty in putting into practice grammatical structures has been the subject of research:

> Strong evidence exists that the ability to demonstrate grammatical knowledge on a discrete-point grammar exam does not guarantee the ability to use that knowledge in ordinary conversation, be it spontaneous or monitored.
>
> (Terrell, 1991, p53)

When it came to describing the processes, the Inductive and Deductive girls gave quite different narratives of how they had learned.

> Inductive Girl: Ehh, we first started off, like, by saying if it was a boy or a girl, or if you were saying it was you, and then we started off saying what they was doing , it was like activities that they was doing, and then it was lot of other things...

AT: Can you describe how you learned it?

Deductive Girl: from them up on the board, and from that sheet we had.

The girls who had experienced an Inductive style described the content of the lesson, whereas the girls who had experienced Deductive style defined their processes through the information sheets and reference sheets they had been given. Both groups expressed very different experiences of their learning, which tied in neatly with the teaching style they had been exposed to.

When asked how much of the lesson they had understood, all the girls were confident that they had understood "quite a lot of it", and would be able to use it themselves independently, but they all said that they would like more practice, with 6 of the girls specifying that they would prefer more group work, as they had benefited from the opportunity to discuss. One of the girls went further to name another student in the group, who had understood the issue clearly and explained it to the rest of the group. Interestingly, the girls who had experienced Deductive teaching emphasised the role of the teacher in the learning process, whereas the girls in the Inductive groups placed greater emphasis on the role of the group in discovering the processes.

Inductive Boys v Deductive Boys

Similarly, there were differences between the perceptions of the activities as experienced by boys when considering whether they had been exposed to a deductive or inductive style of presentation. In each case, the inductive boys

seemed to be able to provide clearer descriptions of what they had learned, as noted below:

> Deductive Boy: I've learned to recognise the *'je'* and the '*tu*' and the pronouns.
>
> Deductive Boy: How to do the *'je'* and the *'il'* and the *'elle'* and all the verbs that go with them an' that.
>
> Inductive Boy: Well, I learned about the '*wird'* and the *'wirst'* and all that , and how to put that into a sentence, but I am still a little fuzzy on where they go.
>
> Inductive Boy: I don't know. I think it was because there was like 6 words, different words, and I think it was just like complicated, what word went where and how to fit them in.

This 'fuzziness' came to the fore only when asked to describe the processes, as the inductive boys were not able to clearly explain exactly what had been learning, however, indications from the completed tasks demonstrate that they were able to understand and complete the tasks. Within the inductive process is an internal system of discovery. The deductive boys had clearly discovered which words went where, but were unable to describe, in terms they were happy with, the processes. There is, therefore, some value in giving students the tools to describe processes.

Throughout the interviews, the deductive boys, like the Deductive girls, paid greater attention to the reference materials they had been given. Because these sheets were clearly marked with common grammar labels, they were able to use the correct terminology during the interviews.

When asked how much they had understood, the deductive boys' answers mirrored the girls, in that they felt confident that, with a little more practice and with reference sheets as a back up, they would be able to use the Future tense independently. However, the inductive boys were less confident. Although they had appreciated the opportunity to work in groups, their overall confidence in being able to work independently was lower. I showed the boys in the inductive group the materials that had been available to the deductive groups, and asked whether they might have gained more confidence through using materials. In each case, the inductive boys would have preferred to have access to the materials, as they felt that this might have helped them. I have included a sample interview transcript at Appendix 19.

7.12 French v German

It is difficult to say whether there were significant differences from the students' responses in interview to the specific issue of whether those learning French had a different experience to those learning German. The German students seemed more comfortable with the specific aspects associated with German – identifying verbs, talking about word order, and pronouns. These terms appear more regularly in German lessons than in French. However, as the students themselves have had no experience of learning the other language, it is difficult to compare their own views on one language with another. It may, perhaps, have been more useful to use a third language, to which none of the students had been exposed, to gain a better picture of their ability to understand structures.

8 The gender gap

The purpose of this research has been to investigate the gender gap in learning a Modern Foreign Language in the secondary school classroom. This leads into the question: Is there a gender gap?

There appears to be very little difference in boys' and girls' aptitude, seen as their natural skills observed or measured at a certain time, when faced with learning a Modern Foreign Language. When aptitude was tested via the medium of English, or in the language to which the students had been exposed, there appeared to be very little difference between boys' and girls' performance at the time of the tests. Having conducted the MLAT-E test on three occasions, with increasing sample sizes, and across a group of students whose ability represents the broad range of abilities in an average secondary school, I feel that these results confirm my experience as a teacher that this is to be expected across a broad population.

Within the language test, again, there appeared to be very little difference between the performance of boys and girls. In this case, the test was tailored to a specific language, and involved a range of tasks designed to elicit different information. Although this test is currently in its infancy, I feel that by repeating it with a wider cohort of students, the results would prove to be similar. The gender gap in aptitude for learning a Modern Foreign Language appears to be very small at the specific stage I tested.

However, aptitude is only one part of demonstrating an ability to learn. We have, at our disposal, a range of statistical measures for achievement,

whether that be from teacher assessments or external assessments such as the GCSE exam. Aptitude can give some indicators of future success, as demonstrated by Pimsleur and Struth (1969), but aptitude, in my research, is not used as a predictor of success, and does not account for all the experiences in the Modern Languages classroom, or the external socio-cultural influences on the child's learning experience. Issues such as motivation, purpose, and determination all have a bearing on the learning of the learner, and the match with set standards. Individual learning styles, teaching strategies, even the relationship between the teacher and the students, or the relationships within the classes themselves can have a bearing on these matters. How a child feels about their learning, whether they feel they are given the opportunity to achieve, whether they feel they have a place in the classroom are all issues which can make a difference.

By investigating the effects of two different teaching strategies, I have been able to move closer to identifying whether boys or girls experience differences in their learning. The students who had been exposed to deductive teaching styles had, in this case, retained more information than those who had used the inductive style. This was not a significant difference, but worthy of note at this stage. Having experienced the opposite result in the initial research, where the inductive group had retained significantly more detail at this stage than their deductive counterparts, I feel that this aspect will require further research over time. It must be borne in mind, however, that the initial research involved only one class of learners, but I still feel that a larger sample would be required in order to definitely state that the

deductive teaching style would allow more students to achieve NC Level 5 than the inductive style.

When investigating the differences between the two languages, French and German, I noted that there was a difference in terminology used. The nature of German required a sometimes mechanical approach to issues such as word order, and verb inversion, therefore the German students found it easier, through familiarity, to accept the terms when they were placed in context, whereas the French classes did not have the same familiarity, but from their discussions and from the results of their tasks, they appear to be as familiar with the usage of the actual words. Although all students are required to use grammar labels through their English lessons, the French students appeared to find it more difficult to transfer this knowledge to a new context than the German students.

Table 21 Summary of results of various tests used in this phase, by gender

Summary by gender	ave /40	ave/20	ave/16	ave/40
	Gap fill	Word Order	Picture narrative	Q/A
All Boys	18.41	11.1	10.31	31
All Girls	19.16	13.14	10.95	31
Inductive Boys	16.79	11.02	10.6	29.5
Inductive Girls	16.84	13.45	10.34	30
Deductive Boys	20.04	11.18	10.02	32.5
Deductive Girls	21.5	12.85	11.56	32

When looking at the students' test results from the point of view of gender, there appears again to be very little difference between the performance of

boys and of girls in any of the tasks when undertaking the group based word order test, or the individual picture narrative, where students were allowed access to reference materials. However, there was a significant difference in the gap fill test, with both boys and girls who had been exposed to deductive teaching scoring higher than their counterparts in the inductive groups, irrespective of language. Given that each class contained a similar range of ability, and the scores of both boys and girls in the individual picture narrative were consistent across the classes, it must be concluded that the participants who received inductive instruction found the gap fill task, where the correct part of the verb *werden / aller* and the infinitive of the main verb had to be included, a more difficult task. This is also consistent with the results of the initial research, which was conducted with a much smaller sample. After the initial research, I had considered whether or not this could be merely an anomaly, however, as the pattern has been repeated with a larger group, it seems significant that inductive teaching in some tasks, here most notably in the gap fill task, demonstrated a wider gap in achievement. However, it must also be noted, that there again appears to be, here, very little significant difference between the performance of boys and girls in all the tasks.

A small-scale study such as this will only provide small scale results, which naturally, cannot be assumed to be representative of a wider population. It may be useful to consider whether a wider research project involving a wider cohort of students would provide similar results.

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For the observation phase, the group work tasks were carried out in single-sex groups. Whereas in the initial study the audiotapes of the groups working together did not display a particular leadership role being taken on by either boys or girls within the groups, when working in single-sex groups, there was within each group one or two students who dominated the activities, and one or two who contributed very little to the discussion, but who did manage to complete the tasks under the leadership of the other group members. However, when comparing the on-task/off-task activity, it seems that initially there was more off task activity from the boys, however, the girls' off task activity lasted longer. The boys' off task activity came in short bursts, whereas the girls chatted about other issues while simultaneously working on the tasks. The test results showed little significant difference between the performance of boys and girls, so the question remains, whether boys and girls learn differently. This research has been prompted by the growing difference in GCSE results of boys and girls in French and German, where girls tend to outperform boys in both languages. Yet, there appears, from this small sample, to be little influence of either deductive or inductive teaching styles on the boys' or girls' ability to acquire information.

9 Limitations of the Research

The findings from my research carried out in the context described show that there is very little difference in boys' and girls' ability to recognise and manipulate language patterns at a certain point in time and that they show little difference in their responses to different teaching approaches when exposed to these for a limited time only. However there are a number of limitations which affect the results and the extent to which wider conclusions can be drawn. The results of the ability test were limited by exposure to one style of aptitude test, using learners who had already had exposure to L2, and the participants' exposure to teaching styles was again limited to one style only – either inductive or deductive. The study took place in a very specific setting, influenced by a predominance of certain teaching approaches in the learners' experience, the school approach to language learning and my own approach to language teaching within that overall context.

First, the Language Aptitude test has its critics (as shown in the methodology section, pp. 90-98), but was designed as a test of aptitude for learning a language. Yet in this research, the MLAT-E test was used with students who had already been studying either French or German. The students who had participated in the language test had not had any prior experience of learning an MFL before entering secondary school. However, by the time of taking the test, they had received 4 terms of instruction in either French or German. The results of this test could potentially also have been affected by the students' experience of formal testing in English (KS1 and 2 SATs, CATs)

and their knowledge of test structures. The language tests based on MLAT-E (devised in French and German) were similarly presented to students who had prior knowledge of the language and this was inevitably the case because it would not make sense to present a French or German test to someone with no knowledge of the language and where the English test would be more appropriate. In the school context in which I work, it would not have been possible to have access to and test groups of students prior to the start of their language courses for the purposes of this research. It is acknowledged therefore that the tests cannot be seen as indicators of aptitude for language learning in general or the learning of French and German in particular. Further research would be needed in contexts where students had not already begun to learn another language.

However, the French and German tests were designed to assess students' ability to recognise and manipulate language patterns at this point in time, following the same structure as the MLAT-E test. Three parts of the MLAT-E test focus on individual words, which makes it suitable for initial learners. The remaining section demonstrates whether the learner can recognise patterns, by identifying either a verb, noun or adverb within a sentence. Only the final section, which dealt with individual words in a fictitious language could possibly have indicated an aptitude, in other words, a flair or tendency, towards foreign language learning, but as this was limited to individual words rather than phrases or sentences, it could be argued that this is a test of ability to recall and recognise words rather than to use them as language.

The development of a second test, following the same structure as the MLAT-E, in that it used 4 sections involving identifying individual words, or recognising parts of speech, moved some way towards meeting the aim of discovering whether the participants had any aptitude towards learning a specific foreign language. Yet again, the students' prior experience may have aided them in achieving results in this test. In the language test, as explained in Section 6 of the thesis, pp. 140-141, vocabulary was chosen in part from a range which was familiar to the students. I felt that this was necessary in order to allow the participants to demonstrate their awareness of the parts of speech. The task ties in with National Curriculum level 4, where pupils "begin to use their knowledge of grammar to adapt and substitute individual words and set phrases". The remaining three sections contained carefully chosen vocabulary items which were unfamiliar to the students, so that no student would be at an obvious advantage.

Therefore, although the tests cannot predict aptitude for learning French and German per se, I believe they show the students' ability, at that point in time, to recognise and manipulate patterns in the languages which they have been studying and indicate that in these circumstances there is little or no difference between boys and girls.

Second, in comparing the responses of boys and girls to inductive and deductive teaching approaches, there are some limitations related to the exposure to teaching approach and the differences between the languages involved.

The students received very limited exposure to a single teaching approach. It can be argued that this would not be enough to override their previous experience of learning the language which was likely to influence the students' responses in the experimental inductive and deductive teaching sessions. Their previous experience would have been set within a particular school approach (discussed below) which probably favours deductive teaching styles and emphasis on application of grammatical rules. If the research were repeated, ideally a significant series of teaching sessions would be set up for each approach. This would mean that the activities which followed to test learning would have more closely reflected the students' learning experience. It could be argued that in this research, the students needed more exposure to language through the inductive approach in order to be able to perform well in the story telling activity, for example. The fact that students repeatedly referred to the past tense rather than the future (the focus of the teaching) when discussing the point, indicates that although they were beginning to manipulate the structure successfully, they needed more time and more examples in context in order to fully grasp what they were engaged in.

The fact that the study involved comparing students learning either French or German can also be seen as a limitation because of the differences between the languages and the differing approaches which students may have been exposed to. Before taking the language test, students had received four terms of instruction in either French or German, using a range of materials which were similar in both languages, from text books provided by the same publisher (*Equipe* and *Klasse*, Heinemann). The topics covered during those

four terms were similar, and the assessment opportunities were of a similar structure. Teaching methods in the department are closely monitored and moderated, to ensure that students have similar access to a similar range of assessment opportunities, provided by the publishers of the relevant text books. It could be argued that it would have been preferable to conduct the language test with participants with no prior exposure to MFL teaching, but that would have made it difficult to construct a meaningful test, which could work within the parameters of the students' knowledge at that time. Further research would be required to determine whether there is any difference in degrees of difficulty between the two tests (French and German). The study tried to take into account the difference in languages by choosing a structure with a high level of similarity and comparability (see Section 6, pp. 140-146).

Within the context of these limitations, however, there were few significant differences between the responses of boys and girls to each teaching approach whether in French or German.

Third, this research took place in the context of a secondary school with clear policies and procedures for the teaching of modern foreign languages (as described in section 1.2; pp. 15-20). Education does not stand still. During the time spent carrying out this research, several changes were made in the nature of the structure of the school in which the research was carried out. The number of students taking an MFL in KS4 has reduced from 6 classes to none during the time of the research. Further, the number of classes taking a GCSE in either KS3 or 4 has now reduced to only 2 - one class in French

and one in German. GCSE results are now emphasised more strongly than previously in the school, and are effectively the sole measure of success - both for individual students, for staff, whose Performance Management targets are aligned to GCSE or GCSE equivalent grades, and to the school as a whole, as outlined in the school Management Plan, and individual departmental Management Plans. Students are assessed at the beginning of each Key Stage using cognitive ability tests to set stringent targets which they are expected to achieve. The view taken by the school leadership is that these tests can and do predict results with a small margin of error, and therefore it is the responsibility of the teachers to ensure that these results are achieved. There is very little flexibility on the part of teachers to renegotiate these targets with school leaders to take account of the circumstances of individual students. The main role of teachers within the school has therefore changed - teachers are required to complete a syllabus and achieve results. In the case of MFL teachers, we now have three years to deliver a full GCSE syllabus instead of five. There is simply no room to deviate from the requirements of the syllabus. As a researcher, I would like to have the flexibility and the option to change the way that MFLs are taught in the school, however, more importantly, as a teacher I would welcome the opportunity and a degree of flexibility within the schemes of work to effect such changes.

Emphasis on cognitive ability influences teaching approaches and the teaching climate of the institution. Pressures on teachers and students also constrained and influenced the research context by determining groups I

could work with, and the time that could be devoted to the research activities. My own and my colleagues' approach to teaching and students' previous experience of learning the language also played a role in how the students experienced the tests and the experimental teaching sessions.

Fourth, as a member of staff in the school with my first duty as a teacher, I attempted to remain aware of pressures and personal perspectives as a researcher (see section 2.7, pp. 78-80; and section 3, particularly pp. 81-82), but have to concede that I am also influenced by the school pressures leading to a tendency to teach structure and manipulation for the tests rather than for spontaneous communication as might ideally be the case. I realise that my views can be recognised in the way I have written about current approaches to language teaching and this situation will have affected the outcomes of the research, particularly in relation to the experiment with teaching approaches. This has brought into focus for me the gulf between the school approach and theoretical views of the nature of language learning and effective language teaching.

The dual role of teacher and researcher has brought to the fore the tensions between theory and practice but I must also add that the research has allowed my students to engage with their learning journey, and to participate in discussions with me, in my role as a researcher as well as teacher. I have also been able to open dialogue with colleagues, as they became more involved in my research, either as participants or as active collaborators. I am now aware that by conducting research in this way, I have been able to

deconstruct some preconceived notions through reading the literature, conducting tests, and discussing a range of ideas with participants and peers. My personal experience throughout this research has led me to understand that the reflective aspect of the journey undertaken by the researcher is as important as the quest for proof, and that there is definitely a place in my research for my story, my journey and my voice.

In spite of all these limitations, the results showed that boys and girls were able to demonstrate similar ability to recognise and work with language patterns and similar reactions to different teaching approaches (see also Lohman & Lakin, (2009), Strand, Deary & Smith (2006)). They became very engaged with the research and keen to show that each could out perform the other group. This highlights the possibility that when engagement and enthusiasm are kindled, by whatever means, the gap between boys' and girls' performance in a language class can disappear. This might be of particular importance in contexts such as this school where students do not have much exposure to or experience of language use outside school. A further area of important research could be to investigate the effects of behaviour and motivation on not only learners, but teachers, in a culture where fewer students are choosing to learn an MFL, and fewer schools are offering an MFL to GCSE.

Further research, as identified above, is necessary if the apparent 'gender gap' at GCSE is to be explained.

10 Conclusions

In the following section I will describe the conclusions drawn from my research.

In 2007, DfES published its paper on "Gender issues in England", and highlighted that languages is not the only area where girls are now achieving higher results:

> The largest gender differences (a female advantage of more than ten percentage points on those gaining an A*-C GCSE) are for the Humanities, the Arts and Languages. Smaller gender differences (a female advantage of five percentage points or less) tend to be in Science and Maths subjects.
>
> (DfES, 2007, p7)

When discussing subject choice at GCSE, the report highlights that:

> Taking the 10 most popular GCSE choices, 9 out of 10 subjects are chosen by both boys and girls. Nonetheless, many subjects show gender stereotypical biases with girls more likely to take arts, languages and humanities and boys more likely to take Geography, Physical Education and IT.
>
> (DfES, 2007, p8)

DfES stated quite clearly that one of the reasons for the gender gap was due to the differences between boys' and girls' particular abilities:

The gender gap arises mainly because of differences between boys and girls in language and literacy skills, reflected in differences in performance in English and other subjects which are literacy based. The gender gap is small

or negligible for Maths and Science. These trends are apparent both from historical data from English exam records going back 60 years and from international data.

But where does this difference in language skills arise? There seems to be very little difference in aptitude between boys and girls when it comes to learning a Modern Foreign Language if the MLAT-E can be taken as a true indication of aptitude. However the paper recognises that there were insignificant differences between IQ and verbal reasoning tests between boys and girls (DfES, 2007, p5). This falls in line with my own experience from the MLAT-E test results.

Although other factors have been mentioned by DfES, these do not relate to the areas of study in this report. It would however, be useful to identify factors which would benefit from further study.

At this point it would be useful to return to the original questions asked at the beginning of this study:

- Do boys and girls display different aptitudes when learning a Modern Foreign Language?
- Does a difference in teaching style affect learning in a secondary school context, either when comparing boys and girls, or when comparing the learning of German or French in similar contexts?

The question remains as to whether the results I have achieved in both the MLAT-E, which involved participation through the native language, and the language specific test which I developed for the purposes of this study represent an anomaly. In both sets of tests, there was little significant difference between aptitude of boys and girls, however, when compared with the Hungarian tests carried out by Kiss and Nikolov, who were able to conduct their tests with a wider range of participants, across a range of schools, they demonstrated that girls outperformed boys in all aspects of the test. It must be borne in mind, however, that Kiss and Nikolov (2005) used the MLAT-E with students for whom English was a foreign language, and so their results can also be viewed as base-line information of language knowledge as opposed to as a predictor of potential aptitude to learn a foreign language.

When I began to use a version of the aptitude test which focussed on the language being learned, as a baseline measure, differences began to emerge, not only between boys and girls, but also between the languages themselves. Learners of French scored more highly in Part 1, Identifying Words, whereas students of German scored more highly in Parts 2 and 3, Identifying parts of speech and rhyming words. It could be that the global distance between German and English accounts for this similarity. Global distances cannot, however account for the higher marks scored by the French participants in section 1. As James admits:

> Consideration of language distance as a way of assessing comparative difficulty, we may conclude, though by no means a

> precise system of measurement, can in fact provide a logical framework within which informed opinion and experience may be weighed.
>
> (James, 1979, p22)

This is indeed the case. There are many variables which affect the comparative difficulty of learning a language, and just as many variables when attempting to discover whether one is more suited to the secondary school learners than another. Had the language test been able to demonstrate a clear difference between aptitude towards learning one language or another, then it may have been possible to recommend that one language be taught in preference to another within secondary schools. However, both languages under review here have been seen to be within the scope of learners. The participants in this research have not demonstrated a tendency to display a greater aptitude in either French or German. Although there may be specific aspects of each language which can be seen to be more accessible to the learners, when it came to the aspects of simply learning new vocabulary, neither French nor German proved to be more or less difficult. The participants were able to cope with learning a range of new words equally well, regardless of whether the words were presented in a fictitious language, as in the MLAT-E, or in a language to which they already had received some instruction (French or German depending on the languages available in school). It would be useful to extend this study by assessing whether those students who currently learn French could just as easily acquire new words in German and vice versa. By conducting further testing in this way, it may be possible to identify whether learning new

vocabulary was in some way related to the familiarity with the sounds, shapes and sequences of the new word which were being introduced.

The research into inductive and deductive teaching styles also proved interesting, as at this point greater differences began to emerge between both boys and girls, and between French and German. It is at this point that the difference between computation and communication comes in – whether learners have been able to work things out or talk them through, and indeed whether the idea of talking it through has enabled them to work things out gives us a clue as to the way students learn. In the deductive phase learners did not have to do either – they were merely presented with information in a series of reference sheets, and use that to create sentences. Whereas the discussion which accompanied the inductive learners saw a mixture of talking it through and working it out. I feel that further research will be necessary, specifically on the role of inductive/deductive teaching styles before any conclusive statements can be made regarding whether one or the other style can be considered, or indeed whether a mix of two styles would be beneficial, to cater for the diversity of learning which does not – according to my findings - depend on gender.

The differences in results at GCSE, at age 16, may be attributed in part to the types of task which students are required to complete for the exams. As can be seen from this research, there was no significant difference between boys and girls when faced with the kinds of tasks which required using one word, or short phrase at a time, as seen in the vocabulary learning aspects of

both the MLAT-E and the language specific tests, as well as in the question and answer activity which made up part of the observation task. However, it was when students were required to develop novel sentences in a format that could form part of a longer passage that the differences began to emerge – with girls performing slightly better in the picture narrative task. Similarly, when faced with completing whole sentences, whether by re-ordering sentences or by filling in gaps, the girls were better able to deal with whole sentences, and the need to complete whole sentences to communicate an idea.

But there is also a question about the age at which students begin learning - aptitude should be based on ability to learn regardless of the age, but the question remains as to whether the age at which learning commences can affect the overall outcome in terms of achievement. As schools in UK are moving towards commencing MFL learning earlier (at the time of writing), with the introduction of the language in KS2, it remains to be seen whether this will affect the overall achievement of students. The current MFL curriculum in primary schools remains experimental, with various approaches being tried by across the country. It will be interesting to revisit the area of achievement by gender in MFL learning after the primary curriculum has become established, and the effects of earlier learning can be seen. It will be interesting to see whether "younger = better in the long run" (Krashen et al., 1979) can make a difference to the eventual achievement of boys and girls in learning a modern foreign language. A recent study conducted via neural processing of language among children concluded that: "Girls were still found

to have significantly greater activation in linguistic areas of the brain"

(Burman, Bitan, & Booth, 2008, p1359).

Burman et al. were able to conduct a range of tests, and simultaneously take images of the brain of a range of children. Their results have shown that girls do indeed have greater abilities in communication, but also recognise that within boys it was not a lack of ability, but a different kind of brain activity which affected their progress in language. While this research can demonstrate the role of brain activity, it does not explain the similarities in outcome between boys and girls in aptitude, or indeed during the various observation tasks I have outlined in this report. It would be interesting to research this area further, to determine whether the differences identified by Burman et al. appear in the secondary school classroom.

> The human brain is a biochemical machine; it computes the relations expressed in sentences and their components. It has a print-out consisting of acoustic patterns that are capable of similar relational computation by machines of the same constitution using the same program.
>
> (Lenneberg, 1969, pp642-3)

It may seem simplistic to ask whether learning a modern foreign language in the secondary school classroom is simply a case of computation or communication. Both are clearly present in the learning process, to varying degrees and at varying points in the learning process. It may be that boys or girls favour one approach or another, at different times during their learning, or are affected by one or other according to the teaching style they are

exposed to. However, one thing that seems to be clear from this research is that regardless of gender, there seems to be very little difference in aptitude for learning between boys and girls. Further research will, therefore be necessary to determine why, with similar aptitudes, there continues to be such a discrepancy in achievement at age 16.

I am a teacher in a secondary school, and this study has been inspired by my observations of working with children in secondary schools. I believe that this study will be of particular relevance to colleagues who work in that field, and who, like me are concerned for the progress of the individual student in our classrooms. It is rare to have an opportunity to compare the experiences of students who have had equal access to similar learning experiences – in many schools, only those students who have achieved a set standard in learning a first foreign language, normally French, are given access to learning German. Therefore, the difference in achievement when the two languages are compared may be, in part, due to the ability levels of the students concerned. However, in this study I was able to evaluate the performance of an equal range of students, none of whom had had previous experience of learning a modern foreign language in school, and none of whom had been selected for studying that language based on ability, experience or aptitude.

I hope that this research will be of particular benefit to teachers in secondary schools, who constantly face the challenge of raising boys' achievement. It is not, however, merely a case of raising boys' achievement, but of creating an

environment where both boys and girls can reach their potential when learning a language in the secondary school context. Since MFL became an optional choice for GCSE, secondary schools have experienced a significant drop in the number of students who make an active choice to learn a language. It could be argued that these falling numbers within secondary MFL classes are testament to the perception of difficulty both boys and girls encounter when learning a language, compared to the other subject choices on offer.

However, there are tactics which can be adopted by MFL teachers which should ensure that students feel a greater level of success. Creating opportunities for that 'eureka moment' by using a range of teaching styles – incorporating a mix of deductive and inductive, will allow the students to be guided to discovery as well as to experience that discovery on their own. This will allow both boys and girls to find their own preferred method of storing and collating data, to compute and to communicate.

Throughout my research, I have considered the ability to learn new words, deal with individual words, and recreate sentences in a structured format, and yet it is the need to create novel sentences which may hold the key to the individual students' realisation that they can, indeed, communicate.

Further research is needed into whether boys and girls can create novel sentences and whether this leads to towards true communication, albeit in the unrealistic setting of a secondary school classroom. The revised GCSE exams are beginning to incorporate this aspect, by, for example, removing the formal role plays from the speaking exam, and replacing them with a

more free flowing transactional conversation element, giving students the opportunity to: "to engage in spontaneous discussion or debate of topics of interest to the age group in pairs or as a member of a group" (Qualifications and Curriculum Authority, 2008). However, with the GCSE still acting as the main measure of curricular language ability, it will be some time before the effects of these changes will be seen.

One of the views held by language teachers is that boys simply cannot learn languages, and that girls can. But what I have shown here is that, in these circumstances, there was very little difference between boys and girls. However, the question cannot end here – it must be investigated further so that we, as practitioners can enable and empower our boys, as well as our girls, to become confident linguists.

The use of aptitude tests has often been criticised, but I would dare to suggest that it is the use to which they are put that has discouraged some from accepting them more readily. When the reason for using it changes, in other words, when the aptitude test is used, not to predict future success, but as an indicator of a current state, then it can be a useful diagnostic tool.

My contribution to educational research is in my belief that researchers must match method to their audience. As I have shown in my literature review, I was influenced more greatly by those pieces of research conducted by teachers. I have listened to my peers, and I hope that they will listen to me.

To summarise, my recommendations for my fellow teachers are as follows: it is important that teachers recognise that, based on the aptitude tests I have conducted, there is little difference between boys and girls in their ability to

learn a language. If we start from the premise that boys *can* learn a language, then they *will* learn. Too often, teachers lose faith in boys' abilities, as can be seen in the plethora of material available to assist in raising boys' achievement. Similarly, employing a range of teaching strategies, incorporating both inductive and deductive styles, can give teachers a greater faith in the boys' ability to learn a language. As teachers, we too often focus on "learning styles", when we ought to focus more squarely on our *teaching* styles, in order to guide discovery and facilitate learning of both boys and girls.

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12 Appendices

List of Appendices

Appendix 1 National Curriculum Attainment Targets

Attainment target 1: Listening and responding

Level 1
Pupils show that they understand a few familiar spoken words and phrases. They understand speech spoken clearly, face to face or from a good-quality recording. They may need a lot of help, such as repetition or gesture.

Level 2
Pupils show that they understand a range of familiar spoken phrases. They respond to a clear model of standard language, but may need items to be repeated.

Level 3
Pupils show that they understand the main points from short spoken passages made up of familiar language. They identify and note personal responses. They may need short sections to be repeated.

Level 4
Pupils show that they understand the main points and some of the detail from spoken passages made up of familiar language in simple sentences. They may need some items to be repeated.

Level 5
Pupils show that they understand the main points and opinions in spoken passages made up of familiar material from various contexts, including present and past or future events. They may need some repetition.

Level 6
Pupils show that they understand the difference between present, past and future events in a range of spoken material that includes familiar language in less familiar contexts. They identify and note the main points and specific details. They need little repetition.

Level 7
Pupils show that they understand longer passages and recognise people's points of view. The passages cover a range of material that contains some complex sentences and unfamiliar language. They understand language spoken at near normal speed, and need little repetition.

Level 8
Pupils show that they understand passages including some unfamiliar material and recognise attitudes and emotions. These passages include different types of spoken material from a range of sources. When listening to familiar and less familiar material, they draw inferences, and need little repetition.

Exceptional performance
Pupils show that they understand the gist of a range of authentic passages in familiar contexts. These passages cover a range of factual and imaginative speech, some of which expresses different points of view, issues and concerns. They summarise, report, and explain extracts, orally or in writing.

Attainment target 2: Speaking

Level 1
Pupils say single words and short, simple phrases in response to what they see and hear. They may need considerable support from a spoken model and from visual clues. They imitate correct pronunciation with some success.

Level 2
Pupils answer simple questions and give basic information. They give short, simple responses to what they see and hear, and use set phrases. Their pronunciation shows an awareness of sound patterns and their meaning is clear.

Level 3
Pupils ask and answer simple questions and talk about their interests. They take part in brief prepared tasks, using visual or other clues to help them initiate and respond. They use short phrases to express personal responses. Although they use mainly memorised language, they occasionally substitute items of vocabulary to vary questions or statements.

Level 4
Pupils take part in simple conversations, supported by visual or other cues, and express their opinions. They begin to use their knowledge of grammar to adapt and substitute single words and phrases. Their pronunciation is generally accurate and they show some consistency in their intonation.

Level 5
Pupils give a short prepared talk that includes expressing their opinions. They take part in short conversations, seeking and conveying information, opinions and reasons in simple terms. They refer to recent experiences or future plans, as well as everyday activities and interests. They vary their language and sometimes produce more extended responses. Although there may be some mistakes, pupils make themselves understood with little or no difficulty.

Level 6
Pupils give a short prepared talk, expressing opinions and answering simple questions about it. They take part in conversations, using a variety of structures and producing more detailed or extended responses. They apply their knowledge of grammar in new contexts. Although they may be hesitant at times, pupils make themselves understood with little or no difficulty and with increasing confidence.

Level 7
Pupils answer unprepared questions. They initiate and develop conversations and discuss matters of personal or topical interest. They improvise and paraphrase. Their pronunciation and intonation are good, and their language is usually accurate.

Level 8
Pupils narrate events, tell a story or relate the plot of a book or film and give their opinions. They justify their opinions and discuss facts, ideas and experiences. They use a range of vocabulary, structures and time references. They adapt language to deal with unprepared situations. They speak confidently, with good pronunciation and intonation. Their language is largely accurate, with few mistakes of any significance.

Exceptional performance
Pupils take part in discussions covering a range of factual and imaginative topics. They give, justify and seek personal opinions and ideas in informal and formal situations. They deal confidently with unpredictable elements in conversations, or with people who are unfamiliar. They speak fluently, with consistently accurate pronunciation, and can vary intonation. They give clear messages and make few errors.

Attainment target 3: Reading and responding

Level 1
Pupils recognise and read out a few familiar words and phrases presented in clear script in a familiar context. They may need visual clues.

Level 2
Pupils show that they understand familiar written phrases. They match sound to print by reading aloud familiar words and phrases. They use books or glossaries to find out the meanings of new words.

Level 3
Pupils show that they understand the main points and personal responses in short written texts in clear printed script made up of familiar language in simple sentences. They are beginning to read independently, selecting simple texts and using a bilingual dictionary or glossary to look up new words.

Level 4
Pupils show that they understand the main points and some of the detail in short written texts from familiar contexts. When reading on their own, as well as using a bilingual dictionary or glossary, they begin to use context to work out the meaning of unfamiliar words.

Level 5
Pupils show that they understand the main points and opinions in written texts from various contexts, including present, past or future events. Their independent reading includes authentic materials. They are generally confident in reading aloud, and in using reference materials.

Level 6
Pupils show that they understand the difference between present, past and future events in a range of texts that include familiar language in less familiar contexts. They identify and note the main points and specific details. They scan written material for stories or articles of interest and choose books or texts to read independently, at their own level. They are more confident in using context and their knowledge of grammar to work out the meaning of unfamiliar language.

Level 7
Pupils show that they understand longer texts and recognise people's points of view. These texts cover a range of imaginative and factual material that contains some complex sentences and unfamiliar language. Pupils use new vocabulary and structures found in their reading to respond in speech or writing. They use reference materials when these are helpful.

Level 8
Pupils show that they understand texts including some unfamiliar material and recognise attitudes and emotions. These texts cover a wide variety of types of written material, including unfamiliar topics and more complex language. When reading for personal interest and for information, pupils consult a range of reference sources where appropriate.

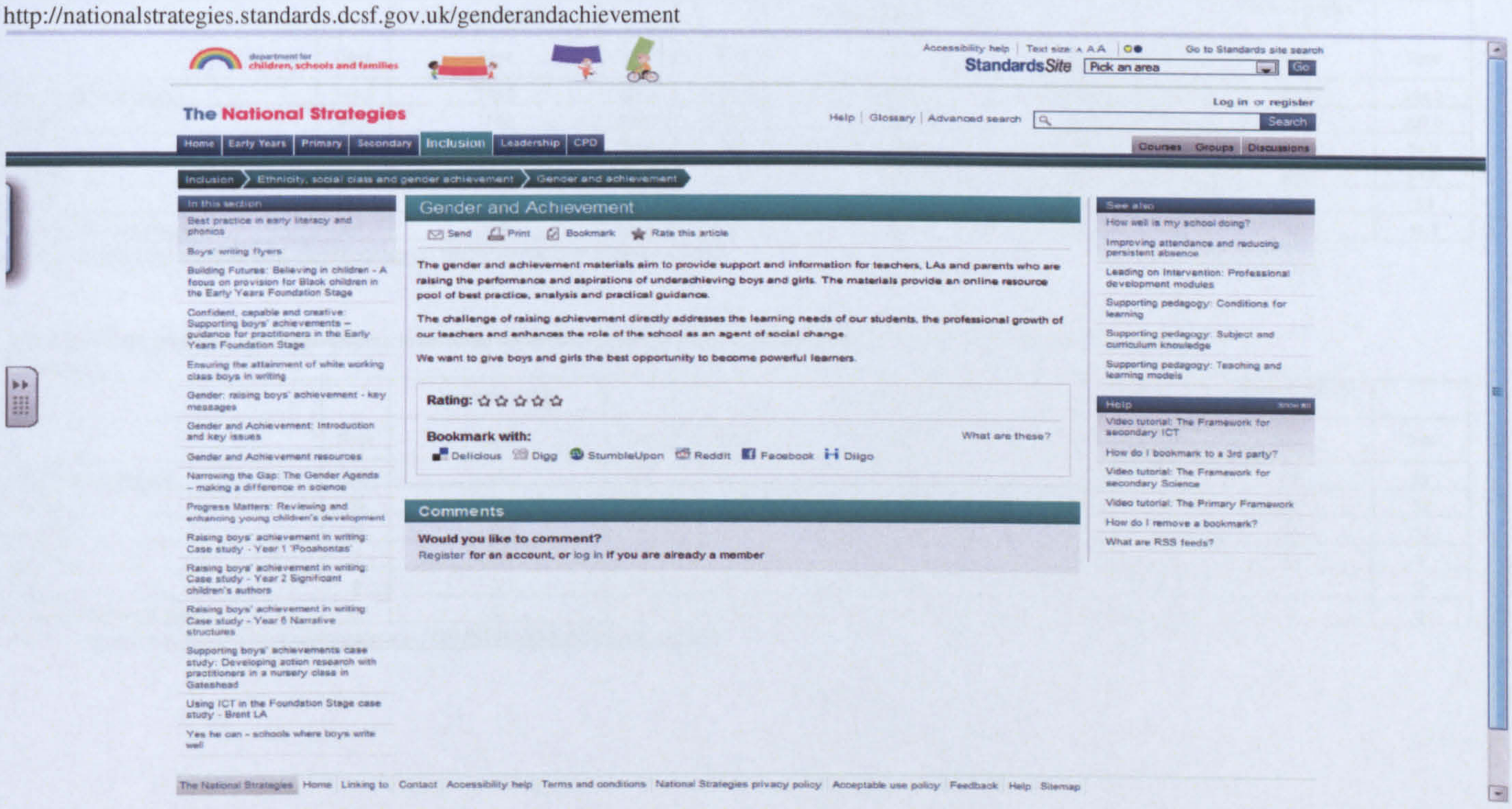
Exceptional performance
Pupils show that they understand a wide range of authentic texts in familiar contexts. These texts include factual and imaginative material, some of which express different points of view, issues and concerns, and which include official and formal texts. Pupils summarise, report, and explain extracts, orally or in writing. They develop their independent reading by choosing and responding to stories, articles, books and plays, according to their interests.

Attainment Target 4: Writing

Level 1
Pupils write or copy simple words or symbols correctly. They label items and select appropriate words to complete short phrases or sentences.
Level 2
Pupils write one or two short sentences, following a model, and fill in the words on a simple form. They label items and write familiar short phrases correctly. When they write familiar words from memory, their spelling may be approximate.
Level 3
Pupils write a few short sentences, with support, using expressions that they have already learnt. They express personal responses. They write short phrases from memory and their spelling is readily understandable.
Level 4
Pupils write short texts on familiar topics, adapting language that they have already learnt. They draw largely on memorised language. They begin to use their knowledge of grammar to adapt and substitute individual words and set phrases. They begin to use dictionaries or glossaries to check words they have learnt.
Level 5
Pupils write short texts on a range of familiar topics, using simple sentences. They refer to recent experiences or future plans, as well as to everyday activities. Although there may be some mistakes, the meaning can be understood with little or no difficulty. They use dictionaries or glossaries to check words they have learnt and to look up unknown words.
Level 6
Pupils write texts giving and seeking information and opinions. They use descriptive language and a variety of structures. They apply grammar in new contexts. Although there may be a few mistakes, the meaning is usually clear.
Level 7
Pupils write articles or stories of varying lengths, conveying opinions and points of view. They write about real and imaginary subjects and use an appropriate register. They link sentences and paragraphs, structure ideas and adapt previously learnt language for their own purposes. They edit and redraft their work, using reference sources to improve their accuracy, precision and variety of expression. Although there may be occasional mistakes, the meaning is clear.
Level 8
Pupils produce formal and informal texts in an appropriate style on familiar topics. They express and justify ideas, opinions or personal points of view and seek the views of others. They develop the content of what they have read, seen or heard. Their spelling and grammar are generally accurate. They use reference materials to extend their range of language and improve their accuracy.
Exceptional performance
Pupils communicate ideas accurately and in an appropriate style over a range of familiar topics, both factual and imaginative. They write coherently and accurately. They use resources to help them vary the style and scope of their writing.

Appendix 2 DCFS: Gender and Achievement

http://nationalstrategies.standards.dcsf.gov.uk/genderandachievement



Appendix 3 Gender Differences in GCSE results, 2004/5 and 2005/6

Table 6: GCSE attempts and achievements in selected subjects of pupils at the end of Key Stage 4 in schools by the end of 2005/06

		Attempted GCSE				Achieved grades A*-C				Achieved grades A*-G	
	Boys	Girls	Total		Boys	Girls	Total		Boys	Girls	Total
Any Modern Language	148 2	179 0	327.2		86.3	123 7	210 0		146 4	177 8	324 2
French	93 5	116.3	209 8		53.9	80 1	133 9		92 4	115 5	207.9
German	40 0	44 8	84 8		25.2	33 0	58 2		39 7	44 6	84 3
Spanish	21 5	30.6	52.1		13 2	21 6	34 9		21.3	30.3	51.6
Italian	1.3	1 8	3 1		1 0	1 5	2 5		1.3	1.8	3 1
Other Modern Languages	8 4	10 0	18 4		6 5	8.3	14 8		8 3	9 8	18 1

source: http://www.dfes.gov.uk/rsgateway/DB/SFR/s000693/index.shtml

Table 10: GCSE attempts and achievements in selected subjects of pupils at the end of Key Stage 4[2] in schools by the end of 2004/05[3] (numbers)

		Attempted GCSE				Achieved grades A*-C				Achieved grades A*-G	
	Boys	Girls	Total		Boys	Girls	Total		Boys	Girls	Total
Any Modern Language	54	65	59		29	43	35		53	64	59
French	35	43	39		18	28	23		34	43	38
German	15	17	16		9	12	10		15	16	16
Spanish	7	10	8		4	7	5		7	10	8
Italian	0	1	0		0	0	0		0	1	0
Other Modern Languages	3	3	3		2	3	2		3	3	3

source: http://www.dfes.gov.uk/rsgateway/DB/SFR/s000564/index.shtml

Appendix 4 Employment status in Castlepoint District Council

Castlepoint District Council

Approximated Social Grade (UV50)				
		Castle Point	East of England	England
		Non-Metropolitan District	Region	Country
All People Aged 16 and over in Households	Apr-01	69338	4218352	38393304
AB: Higher and intermediate managerial / administrative / professional	Apr-01	13481	992396	8520649
C1: Supervisory, clerical, junior managerial / administrative / professional	Apr-01	23148	1283952	11410569
C2: Skilled manual workers	Apr-01	12437	657193	5780577
D: Semi-skilled and unskilled manual workers	Apr-01	10339	653523	6538308
E: On state benefit, unemployed, lowest grade workers	Apr-01	9933	631288	6143201
Approximated Social Grade (UV50), Apr01				
Approximated Social Grade (UV50), Apr01				
Approximated Social Grade (UV50)				

LastUpdated 23-Sep-05
Source Office for National Statistics

FORM
EA

MODERN LANGUAGE APTITUDE TEST – ELEMENTARY VERSION

JOHN B. CARROLL

STANLEY M. SAPON

TO THE PUPIL

This test will help you and your teacher find out how easily you could learn another language besides English. Listen carefully to all the instructions and try to do your very best. Some parts of the test may be easy for you, and other parts may be harder.

Fill out these spaces: Today's date is _____

My name is (print) _____

I am a ☐ boy ☐ girl I am now in grade _____ Age _____

School _____ City or town _____

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO.

Do not write in this box.

1._____
2._____
3._____
4._____
Total _____
Percentile_____

Second Language Testing, Inc., 10715 Mist Haven Terrace, N Bethesda MD 20852
Ph 301-231-6046, Fax 301-231-9536, www.2LTI.com
Printed in U S A

PART 1. HIDDEN WORDS

The teacher will read these directions along with you.

Look at these words:

apl opn animl slo

Can you tell what these words are? They are not completely spelled out, or else they are spelled in a strange way. We will call them HIDDEN WORDS.

Here is what the first two words really are:

apl apple opn open

See if you can write the others.

animl _____ slo _____

Now that you have had some practice in finding Hidden Words, let's see how we will do the test. Up to now you wrote the Hidden Word in the answer space. From now on you will still have to find the Hidden Words, but instead of writing out the answer, you will find a word or a group of words that means the same thing as the Hidden Word. This is how you will do it:

apl ☐ a month of the year ☒ a kind of fruit
☐ lazy ☐ a boy's name

---

opn ☐ jump ☐ small animal
☒ not closed ☐ dark color

Now try these:

betl ☐ furniture ☐ closet
☐ insect ☐ fish

---

sentr ☐ the middle of a circle ☐ a song
☐ a flower ☐ a bird

STOP. DO NOT TURN THE PAGE.

PART 1

>> >> >>

For each Hidden Word, mark the word or group of words that means the same thing:

1. rivr ☐ large stream of water ☐ a jealous person ___
☐ hill ☐ a dog's name

2. nedl ☐ a kind of plant ☐ something used for sewing ___
☐ something heavy ☐ wise

3. ansr ☐ true ☐ illness ☐ argue ☐ reply ___

4. nikl ☐ a bright light ☐ a small basket ___
☐ a five-cent coin ☐ a sharp pain

5. midl ☐ dirty ☐ disturb ☐ blame ☐ in between ___

6. nif ☐ a sharp tool ☐ a part of the body ___
☐ a kind of paint ☐ a small animal

7. tn ☐ park ☐ a kind of sword ___
☐ a number ☐ soon

8. oshn ☐ honest ☐ to shut tightly ___
☐ the sea ☐ sticky

9. silns ☐ brick ☐ wind ☐ box ☐ quiet ___

10. ruf ☐ strong wind ☐ top of a house ___
☐ a kind of wood ☐ a large bug

Page total: ____
(10 possible)

GO ON TO THE NEXT PAGE

PART 2. MATCHING WORDS

In this part of the test you will learn something about the different jobs that words can do in sentences. Look at the first group of sentences, and pay special attention to the words printed in capital letters. We will call these words KEY WORDS.

1. MARY likes carrots.
2. Silly PETER took my hat.
3. ALICE is cutting the apple
4. A little BIRD sits on a tree
5. The child's CUP fell down.

A. SUSAN hurt her finger.
My puppy eats biscuits.

☐ ☐ ☐ ☐

B. Did YOU buy the nice picture?
Tomatoes grow on a vine.

☐ ☐ ☐☐ ☐

NOW LISTEN CAREFULLY TO THE DIRECTIONS

---

1. Paul SOLD his baseball
2. The kitten FELL in the well.
3. The sun SHINES brightly now.
4. Birds FLY high in the sky.
5. My mother WROTE me a letter.

A. Henry THREW the heavy stone.
Sally rides a bicycle.

☐☐☐ ☐

B. The wolf RAN into the forest.
Jack killed the giant.

☐ ☐ ☐ ☐

---

1. The RED hen laid an egg.
2. I saw an OLD man in the car.
3. Will you bring the SMALL book?
4. He sang us a HAPPY song.
5. Fred pushed the HEAVY desk.

A. The LITTLE boy caught a fish.
I want to buy sweet cookies.

☐ ☐ ☐ ☐ ☐

B. Jill wore a GREEN dress.
Alex wanted a new sled.

☐ ☐ ☐☐ ☐

---

1. Ned cut the APPLE.
2. I didn't mean to hurt YOU.
3. Do you like to eat PIE?
4. The policeman shot the THIEF.
5. I broke the WINDOW last night.

A. Peter fixed my DOLL.
The cat killed the mouse.

☐☐ ☐ ☐ ☐

B. The dentist pulled my TOOTH today.
Fred wrote a long letter.

☐ ☐☐☐ ☐

STOP. DO NOT TURN THE PAGE UNTIL THE SIGNAL IS GIVEN

>> >> >>

PART 2

1. A small BOY rang the bell. ___
   Our dog never bites the mailman.
   □ □ □ □ □ □

2. The BLACK cat ran under the bed. ___
   In Africa the hot sun shines brightly.
   □ □ □□ □ □ □

3. Last summer my FATHER took me to the circus. ___
   Years ago, people lived in caves.
   □ □ □ □ □ □

4. Peter WINDS his clock every night. ___
   In the summer the warm winds blow.
   □□ □ □ □ □ □

5. I cut my FINGER with a knife. ___
   Susan picked up her doll.
   □ □ □ □ □

6. Give your dog WATER when he is thirsty. ___
   I know he tore the book on purpose.
   □□ □□ □ □□ □

7. ELEPHANTS like to eat peanuts. ___
   Gentle rain is good for flowers.
   □ □ □ □□ □

8. My brother FORGOT his lessons. ___
   The little mouse ran from the cat.
   □ □ □ □ □ □□

9. Children love to play in the COLD snow. ___
   Carrying bricks is hard work for me.
   □ □ □□ □ □ □

10. I always SHUT the door behind me. ___
    Three little dogs chased the large dog.
    □ □ □ □ □ □ □

Page total: _____
(10 possible)

GO ON TO THE NEXT PAGE.

PART 3. FINDING RHYMES

This part is a test of how well you can find words that rhyme.

If you were making up a poem, and had gone just so far, like this:

"The happy little frog
Was sitting on a _____"

which of these four words could you put in the blank space?

☐ stone ☐ fence ☐ log ☐ rock

The word "log " is the one that rhymes with "frog, " and to show that we should choose "log," make an X in the box next to it.

Let's practice finding words that rhyme. Look at the word BED just below here. Then look at the four words at the right. Which one rhymes with BED?

BED..... ☐ bat..... ☐ bleed..... ☐ red..... ☐ pillow

Red is the word that rhymes with BED, so make an X in the box next to it.

Now try these:

PART..... ☐ shirt..... ☐ heart..... ☐ party..... ☐ past

FEEL..... ☐ real..... ☐ sale..... ☐ tell..... ☐ will

LEARN..... ☐ lean..... ☐ corn..... ☐ loon..... ☐ burn

CLEAN..... ☐ green..... ☐ nine..... ☐ win..... ☐ wren

Notice that some words may rhyme even when they are not spelled in the same way. For example, LEARN rhymes with burn even though these words do not use the same letters.

There will be more questions like this in the test.

STOP. DO NOT TURN THE PAGE.

PART 3

	>>	>>	>>	
1. DOOR..... ☐	car..... ☐	four..... ☐	mayor..... ☐	our ___
2. BEEF..... ☐	calf ..... ☐	if ..... ☐	knife..... ☐	leaf ___
3. PIE ..... ☐	may..... ☐	pea..... ☐	sky..... ☐	three ___
4. MAKE..... ☐	break..... ☐	like ..... ☐	leak ..... ☐	peak ___
5. RAIN..... ☐	dawn..... ☐	Jane..... ☐	man..... ☐	mine ___
6. ALL..... ☐	fail..... ☐	meal..... ☐	owl..... ☐	wall ___
7. FACE ..... ☐	case ..... ☐	fast..... ☐	pass..... ☐	pays ___
8. MIX..... ☐	kicks..... ☐	lakes..... ☐	likes..... ☐	talks ___
9. LOW..... ☐	allow..... ☐	blow..... ☐	cough..... ☐	flaw ___
10. SAY..... ☐	fee..... ☐	my ..... ☐	tie..... ☐	tray ___
11. MINE..... ☐	loan..... ☐	Maine..... ☐	mean..... ☐	sign ___
12. MEND..... ☐	cleaned..... ☐	friend..... ☐	kind..... ☐	pinned ___
13. YOU..... ☐	few..... ☐	how..... ☐	law..... ☐	toe ___
14. DASH..... ☐	brush..... ☐	push..... ☐	splash ..... ☐	wash ___
15. HOLE..... ☐	pool..... ☐	roll..... ☐	tall..... ☐	towel ___
16. PULL..... ☐	roll..... ☐	dull..... ☐	school..... ☐	wool ___
17. PRINCE..... ☐	lines..... ☐	mints..... ☐	paints..... ☐	pins ___
18. NAME..... ☐	aim..... ☐	farm..... ☐	rhyme..... ☐	term ___
19. SHOOT..... ☐	coat..... ☐	foot..... ☐	fruit..... ☐	got ___
20. MAID..... ☐	feed..... ☐	grade..... ☐	ride..... ☐	sad ___
21. SCHOOL ..... ☐	doll ..... ☐	coil..... ☐	rule..... ☐	whole ___
22. ROSE..... ☐	froze..... ☐	grease..... ☐	mouse..... ☐	toss ___

Page total: ____
(22 possible)

GO ON TO THE NEXT PAGE.

PART 4. NUMBER LEARNING

We are going to have a lesson in learning the names of numbers in a new language. I will teach you the numbers and you will say them aloud after me. After we have practiced together for a while, I will say them aloud again, and you will write them down.

Now listen carefully.

PRACTICE EXERCISE 1

a. 3
b. _____
c. _____
d. _____
e. _____
f. _____

PRACTICE EXERCISE 2

a. 20
b. _____
c. _____
d. _____
e. _____
f. _____

PRACTICE EXERCISE 3

a. 21
b. 2
c. _____
d. _____
e. _____
f. _____

STOP. DO NOT GO ON TO THE NEXT PAGE.

Appendix 6 List of words for inclusion in Language Test

Part 1 Identifying Words

bijouterie	Schmuck
chomeur	arbeitslos
déchets	Abfall
bruit	Lärm
matières	Fächer
disputer	streiten
bête	doof
environ	ungefähr
peur	Angst
vendeuse	Verkäuferin
moquette	Teppich
livrer	austragen
l'aspirateur	Staubsauger
avaler	schlucken
soif	Durst
sentir	riechen
potage	Eintopf
couvert	bedeckt
circulation	Verkehr
douane	Zoll
rêver	träumen

Part 3 Rhyming words:
German

1	Kekse	Käfig	Hexe	hektisch	Hecke
2	Fähre	Ehre	Fahrt	Vater	fahre
3	sehen	Nähe	Ecke	Seele	nähen
4	Bart	Barde	apart	Torte	bunt
5	Wald	Wand	kahl	kalt	Wort
6	der	Dauer	entfernt	Haar	Bär
7	enger	Menge	länger	ernst	Engel
8	fest	Feind	lässig	läßt	los
9	Welt	Wort	Held	gelb	Herz
10	ist	frißt	Ost	heißt	Durst
11	Stahl	stehlen	Halle	Ball	Fälle
12	März	hart	Salz	Pest	Herz
13	enden	wandern	Händen	Länder	Sünden
14	wahr	klar	sparen	mehr	sehr
15	Schuh	Schule	Zoo	zu	Stau
16	Männer	dünner	Renner	rennen	kennen
17	Türen	Toren	fahren	Ohren	führen
18	Blicks	fix	Tisch	Blatt	Fuchs
19	man	sein	Sahne	kann	krank
20	hier	heil	mir	mehr	heim
21	Magen	flecken	mögen	fliegen	klagen
22	Ohr	vor	Feier	Ort	Form
23	hin	Lohn	Sinn	dünn	Heim
24	hält	Hut	weit	Welt	gilt
25	sein	grün	meist	stehlen	mein
26	Lied	leid	Ried	Rede	Meile
27	sich	dick	Sog	mag	mich
28	Pirat	Pilot	Verrat	Gerät	genau
29	Gedicht	gedacht	gesetzt	gewohnt	Gesicht
30	dir	Mauer	Bier	Bein	dein
31	nehmen	kommen	kämmen	sehen	nagen
32	Kräfte	Liebe	habe	Kraft	Hefte
33	stinkt	Streich	Seite	Sinn	singt
34	Wein	Rhein	Wien	Miene	Ren
35	suchen	Bücher	sucht	Kuchen	Küche
36	mähen	mögen	gehen	lügen	Verein
37	viele	weil	Ahle	wählen	Diele
38	mehr	für	sehr	Haare	vor
39	schön	Fön	schon	Schaum	Blume
40	Leute	launisch	Zeug	Laute	heute

Part 3 Rhyming words
French

1	aime	art	aiment	ainé	âme
2	outil	reptile	textile	utile	tactile
3	faire	fer	franc	foyer	foi
4	boire	peur	faux	banc	voir
5	lettre	battre	mâitre	feutre	hûitre
6	sable	diable	faible	meuble	tremble
7	laid	barre	les	lac	bol
8	volant	couloir	volonté	collier	collant
9	dans	doux	donne	dent	dure
10	cher	chaise	champ	chat	chaire
11	être	mettre	filtre	montre	peintre
12	malheur	siffleur	voleur	valeur	jongleur
13	entre	titre	poudre	tire	montre
14	hamster	porter	gangster	goûter	hanter
15	comment	récent	serpent	roman	écran
16	avoir	saveur	savoir	avis	espoir
17	chauffer	trophée	chambre	tracteur	chausson
18	brancher	tranchée	cacher	tricher	brosser
19	trottoir	grogner	frotter	traiteur	frottoir
20	manteau	bureau	tantôt	tante	manger
21	guichet	pichet	billet	cherchent	assez
22	freiner	genou	gêner	français	demander
23	village	million	ville	huilage	emballage
24	sanglant	cinglant	enfant	souvent	ceinture
25	exclusif	adhésif	explosive	positif	abusif
26	bruit	gratuit	truie	brut	triste
27	eau	pain	chou	chaud	fait
28	verre	vert	serré	fourrer	vue
29	frite	droite	cuite	froid	cité
30	oiseau	cloison	oignon	nasaux	clocher
31	corps	sport	croire	temps	couche
32	faux	grosse	faim	fille	gros
33	agent	bonbon	amant	achat	forfait
34	jus	gris	gros	dû	joué
35	plat	bras	classe	brun	pluie
36	aux	deux	tout	clou	clos
37	boisson	buisson	poisson	puissant	naissance
38	cheveu	neveu	chevaux	niveau	nouveau
39	tremble	cyclable	trouble	comble	ensemble
40	beau	dos	deux	boeuf	tuer

Part 4 Learning new words

umbrella	le parapluie	der Regenschirm
lighthouse	la phare	der Leuchtturm
suitcase	la valise	der Koffer
knife	le couteau	das Messer
glasses	les lunettes	die Brille
the world	le monde	die Erde
thunderstorm	l'orage	das Gewitter
tap	le robinet	der Wasserhahn
key	la clef	der Schlüssel
duck	le canard	die Ente
saw	la scie	die Säge
traffic lights	les feux	die Ampel
bucket	le seau	der Eimer
match	l'allumette	das Streichholz
leaf	la feuille	das Blatt
tree	l'arbre	der Baum
airplane	l'avion	das Flugzeug
present	le cadeau	das Geschenk
armchair	le fauteuil	der Sessel
basket	le panier	der Korb

Appendix 7 Language Test - French

French

Aptitude Test

Name:_____

French class:_____

Form:_____

Target Level:_____

Male: ☐ Female: ☐

Date:_____

Do not write in this box	
Part 1	_____
Part 2	_____
Part 3	_____
Part 4	_____

Part 1 Identifying words

Listen to the following words. Choose the word which most closely matches the one you hear.

For example:

1	usine	☐	utile	☐	usage	☐	union	☐

The correct answer was usine

1	usine	☒	utile	☐	usage	☐	union	☐

Now try the following three examples:

1	plier	☐	client	☐	avion	☐	souffrir	☐
2	devoir	☐	venir	☐	rêver	☐	voir	☐
3	vendre	☐	lever	☐	sortir	☐	avenir	☐

Identify the word you hear

	Mark X in the box to indicate your answer								Do not write here
1	jouer	☐	bijouterie	☐	chouette	☐	bijou	☐	_____
2	choufleur	☐	gouverner	☐	journal	☐	chomeur	☐	_____
3	décrire	☐	technique	☐	bébé	☐	déchets	☐	_____
4	annonce	☐	ange	☐	envelope	☐	énoncer	☐	_____
5	matières	☐	maillot	☐	palir	☐	lenteur	☐	_____
6	dépenser	☐	regulier	☐	disputer	☐	meuble	☐	_____
7	pâté	☐	gamin	☐	entre	☐	bête	☐	_____
8	ambience	☐	environ	☐	losange	☐	ondulé	☐	_____
9	soir	☐	peur	☐	planche	☐	partir	☐	_____
10	aveugle	☐	faible	☐	vendeuse	☐	quelque	☐	_____
11	musique	☐	muser	☐	moquette	☐	machine	☐	_____
12	livrer	☐	pauvre	☐	sauvage	☐	bizarre	☐	_____
13	Londres	☐	repartir	☐	trottoir	☐	l'aspirateur	☐	_____
14	revenir	☐	avaler	☐	éviter	☐	sauver	☐	_____
15	soif	☐	giraffe	☐	seul	☐	lait	☐	_____
16	venir	☐	peinture	☐	mauvais	☐	sentir	☐	_____
17	voyage	☐	potage	☐	pistache	☐	tomate	☐	_____
18	suivre	☐	pousser	☐	couvert	☐	étouffer	☐	_____
19	circulation	☐	présentation	☐	terrasse	☐	épaisse	☐	_____
20	gouache	☐	tatouage	☐	douane	☐	louable	☐	_____
							Total for page		

Check your work.
Do not turn the page.

In this part of the test, you will identify how different words have different functions within a sentence. Look at the examples.

1 Le CHIEN mange de la viande	Le ☐ chat ☐ va ☐ dormir ☐
2 Martin AIME faire du vélo	Je ☐ joue ☐ au ☐ tennis ☐
3 Mon frère travaille À Londres	Son ☐ oncle ☐ reste ☐ à la ☐ maison ☐
4 Elle porte une jupe NOIR.	Le ☐ petit ☐ chat ☐ va ☐ dormir ☐

Look at the words in CAPITAL LETTERS. What word in the second sentence has the same job as the word in CAPITAL LETTERS in the first sentence?

	Mark the correct answer with X	Do not write here
1 Le CHIEN mange de la viande	La femme lis un roman ☐ ☐ ☐ ☐ ☐	
2 J'adore la GÉOGRAPHIE	Je joue au foot ☐ ☐ ☐ ☐	
3 Ma tante va EN France	Son oncle reste à la maison ☐ ☐ ☐ ☐ ☐	
4 Le chat NOIR boit du lait	Demain le grand chien va dormir ☐ ☐ ☐ ☐ ☐ ☐	
5 J'ai un STYLO	Mon père a les cheveux gris ☐ ☐ ☐ ☐ ☐ ☐	
6 Le DESSIN, c'est super	Le riz, c'est bon pour la santé ☐ ☐ ☐ ☐ ☐ ☐ ☐	
7 Tu TE lèves à quelle heure?	Ma mère se repose le weekend ☐ ☐ ☐ ☐ ☐ ☐	
8 LUNDI, j'ai l'informatique	Mon anniversaire, c'est en hiver ☐ ☐ ☐ ☐ ☐	
9 Nous allons EN ville	Paul va au collège ☐ ☐ ☐ ☐	
10 Le collège est assez MODERNE	Mon frère est très petit ☐ ☐ ☐ ☐ ☐	
11 Nathalie ACHÈTE des crayons	Jean et Phillipe boivent du coca ☐ ☐ ☐ ☐ ☐ ☐	
12 Nous allons au CINÉMA	Yannick va à la plage ☐ ☐ ☐ ☐ ☐	
13 PRENEZ la première rue à gauche	Bois beaucoup de l'eau ☐ ☐ ☐ ☐	
14 On ne PEUT pas nager ici	Puis - je jouer au golf? ☐ ☐ ☐ ☐ ☐	
15 J'ai FROID	Je n'ai pas faim ☐ ☐ ☐ ☐	

Go on to the next page

	Mark the correct answer with X	Do not write here
16 Tu as UN stylo?	Le lapin a une carotte ☐ ☐ ☐ ☐ ☐	
17 La poste est ENTRE le café et la gare	On se retrouve devant le cinéma ☐ ☐ ☐ ☐ ☐ ☐	
18 OÙ est la salle à manger?	Tu arrives quand? ☐ ☐ ☐	
19 JEUDI on va faire une pique-nique	Elle va faire son lit demain ☐ ☐ ☐ ☐ ☐ ☐	
20 Je voudrais un NOUVEAU ordinateur	Martin porte un pull bleu ☐ ☐ ☐ ☐ ☐	
21 Hier j'ai NAGÉ	Jasmine est allée à Nice ☐ ☐ ☐ ☐ ☐	
22 Nous rentrons chez nous le WEEKEND	Le soir je regarde la télé ☐ ☐ ☐ ☐ ☐ ☐	
23 Les deux HOMMES boivent du café	La serveuse parle aux hommes ☐ ☐ ☐ ☐ ☐	
24 LA maison est mal rangée	Hier, la fille a vu un film ☐ ☐ ☐ ☐ ☐ ☐ ☐	
25 Papa a FAIT un gâteau.	Nous avons observé le ciel ☐ ☐ ☐ ☐ ☐	
26 POURQUOI tu ne vas jamais au zoo?	Tu t'appelles comment? ☐ ☐ ☐	
27 Ça COÛTE combien?	Vous êtes en retard ☐ ☐ ☐ ☐	
28 Ta SOEUR est intélligente?	Pierre aime jouer du piano ☐ ☐ ☐ ☐ ☐	
29 Tu APPRENDS le français depuis quand?	Nous mangeons souvent le poisson ☐ ☐ ☐ ☐ ☐	
30 J'ai déjà fait MES devoirs	Maman a perdu son sac ☐ ☐ ☐ ☐ ☐	

Check your work.
Do not turn to the next page.

Part 3 Rhyming words

In this part of the test, you will identify words that rhyme. Not all words that rhyme look the same. Try to find the words sound most like the word in the first column

1	joue		chou ☐	jouer ☐	bleu ☐	chouette ☐
2	part		mère ☐	quatre ☐	car ☐	carré ☐
3	nation		pension ☐	maintient ☐	pression ☐	passion ☐

Rhyming words

1	aime		art ☐	aiment ☐	ainé ☐	âme ☐		
2	faire		fer ☐	franc ☐	foyer ☐	foi ☐		
3	boire		peur ☐	faux ☐	banc ☐	voir ☐		
4	laid		barre ☐	les ☐	lac ☐	bol ☐		
5	volant		couloir ☐	volonté ☐	collier ☐	collant ☐		
6	dans		doux ☐	donne ☐	dent ☐	dure ☐		
7	cher		chaise ☐	champ ☐	chat ☐	chaire ☐		
8	être		mettre ☐	filtre ☐	montre ☐	peintre ☐		
9	malheur		siffleur ☐	voleur ☐	valeur ☐	jongleur ☐		
10	hamster		porter ☐	gangster ☐	goûter ☐	hanter ☐		
11	avoir		saveur ☐	savoir ☐	avis ☐	espoir ☐		
12	chauffer		trophée ☐	chambre ☐	tracteur ☐	chausson ☐		
13	brancher		tranchée ☐	cacher ☐	tricher ☐	brosser ☐		
14	trottoir		grogner ☐	frotter ☐	traiteur ☐	frottoir ☐		
15	manteau		bureau ☐	tantôt ☐	tante ☐	manger ☐		
16	guichet		pichet ☐	billet ☐	cherchent ☐	assez ☐		
17	freiner		genou ☐	gêner ☐	français ☐	demander ☐		
18	exclusif		adhésif ☐	explosive ☐	positif ☐	abusif ☐		
19	eau		pain ☐	chou ☐	chaud ☐	fait ☐		
20	verre		vert ☐	serré ☐	fourrer ☐	vue ☐		
21	frite		droite ☐	cuite ☐	froid ☐	cité ☐		
22	oiseau		cloison ☐	oignon ☐	nasaux ☐	clocher ☐		
23	corps		sport ☐	croire ☐	temps ☐	couche ☐		
24	faux		grosse ☐	faim ☐	fille ☐	gros ☐		
25	jus		gris ☐	gros ☐	dû ☐	joué ☐		
26	plat		bras ☐	classe ☐	brun ☐	pluie ☐		
27	aux		deux ☐	tout ☐	clou ☐	clos ☐		
28	boisson		buisson ☐	poisson ☐	puissant ☐	naissance ☐		
29	cheveu		neveu ☐	chevaux ☐	niveau ☐	nouveau ☐		
30	beau		dos ☐	deux ☐	boeuf ☐	tuer ☐		
							Total	

Check your work.
Do not turn the page.

Part 4 Learning new words

In this part of the test, you will learn some new words.
You will then have the opportunity to show how many of the new words you have learned, by choosing the correct word from a selection of words.

le parapluie

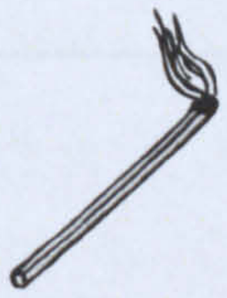
le phare

la valise

X

les lunettes

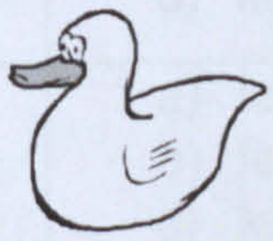
le monde



l'allumette

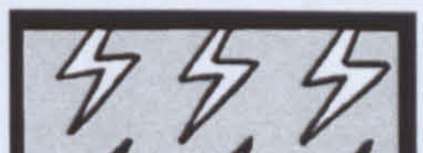
le robinet

la clé



le canard

les feux



l'orage

la feuille

l'arbre

l'avion

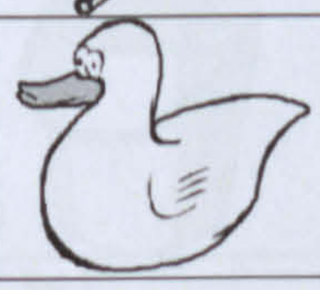
le panier

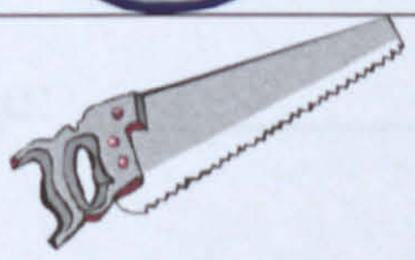
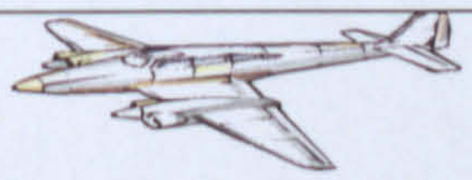
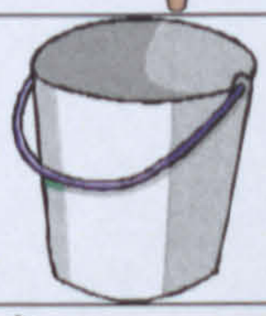
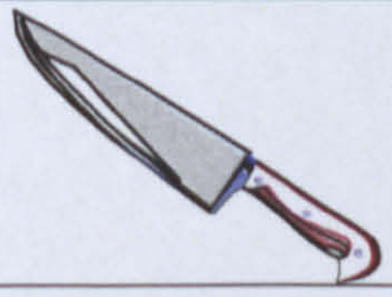
le cadeau

le fauteuil

la scie

le seau

		Choose the correct word. Write a, b, c or d in the answer column	Write your answer here	Do not write here
1		a) le robinet b) les lunettes c) la lumière d) la canette		
2		a) le basket b) le panier c) le bateau d) la valise		
3		a) le clou b) le canard c) le clé d) le coup		
4		a) la feuille b) la forme c) la forêt d) le fait		
5		a) la vallée b) la suite c) la case d) la valise		
6		a) le gâteau b) le château c) le cadeau d) le carton		
7		a) le robot b) l'eau c) le tapage d) le robinet		
8		a) l'allumette b) l'allée c) la lune d) les lunettes		
9		a) le couteau b) le canard c) le coude d) le couloir		
10		a) l'orange b) l'armée c) l'arbre d) l'orage		
			Total for page	

		Choose the correct word. Write a, b, c or d in the answer column	Write your answer here	Do not write here
11		a) la feuille b) l'arbitre c) la farine d) l'arbre		
12		a) le parasol b) la perruche c) le parapluie d) la perle		
13		a) le feutre b) les feux c) la feuille d) le fou		
14		a) le père b) la poire c) la phase d) le phare		
15		a) le monde b) le menton c) le mouton d) la main		
16		a) le seau b) la scène c) la scie d) le sabot		
17		a) l'avis b) l'éveil c) l'avion d) l'étui		
18		a) la chaise b) le fauteuil c) la chair d) la faute		
19		a) le seau b) la peau c) la scie d) la pile		
20		a) le couteau b) le canapé c) le coteau d) le canard		
			Total for Part 4	

Appendix 8 Language Test German

German

Aptitude Test

Name:_____

German class:_____

Form:_____

Target Level:_____

Male: ☐ Female: ☐

Date:_____

Do not write in this box	
Part 1	_____
Part 2	_____
Part 3	_____
Part 4	_____

Part 1 Identifying words

Listen to the following words. Choose the word which most closely matches the one you hear.

For example:

1	Fabrik	☐	Farbe	☐	Rubrik	☐	Klinik	☐

The correct answer was Fabrik

1	Fabrik	☒	Farbe	☐	Rubrik	☐	Klinik	☐

Now try the following three examples:

1	lebende	☐	Kunde	☐	klebende	☐	Wände	☐
2	sterben	☐	Erbsen	☐	Werbung	☐	werben	☐
3	Herkunft	☐	Zustand	☐	Baukunst	☐	Zukunft	☐

Identify the word you hear

	Mark X in the box to indicate your answer								Do not write here
1	Ausdruck	☐	züruck	☐	Pflicht	☐	Schmuck	☐	____
2	arbeitslos	☐	geschäftslos	☐	Artigkeit	☐	geheim	☐	____
3	Fußball	☐	Abfall	☐	Fälle	☐	Abfahrt	☐	____
4	Form	☐	Turm	☐	Lärm	☐	lauwarm	☐	____
5	Fächer	☐	früher	☐	Körper	☐	kleiner	☐	____
6	heiraten	☐	reiten	☐	atmen	☐	streiten	☐	____
7	doof	☐	Bahnhof	☐	Dom	☐	Baum	☐	____
8	gefährlich	☐	ungefähr	☐	Vorfahr	☐	fahren	☐	____
9	Empfang	☐	Aufgang	☐	Angst	☐	Zwang	☐	____
10	Vorläufer	☐	verreisen	☐	Verkäuferin	☐	Vorhersage	☐	____
11	Teppich	☐	kindlich	☐	Rettich	☐	rundlich	☐	____
12	fragen	☐	einladen	☐	umschlagen	☐	austragen	☐	____
13	Schlazeuger	☐	Staubsauger	☐	Augen	☐	lügen	☐	____
14	decken	☐	schlucken	☐	einpacken	☐	schicken	☐	____
15	Durst	☐	forsch	☐	durch	☐	Wurst	☐	____
16	Streifen	☐	fliegen	☐	riechen	☐	neiden	☐	____
17	töpfern	☐	Eiweiß	☐	Elfenbein	☐	Eintopf	☐	____
18	schreckt	☐	Eisenblech	☐	Bereich	☐	bedeckt	☐	____
19	Abkehr	☐	Volontär	☐	Verkehr	☐	Unklar	☐	____
20	Ball	☐	Zoll	☐	trollen	☐	Voll	☐	____
							Total for page		

Check your work.
Do not turn the page.

Part 2 Matching Words:

In this part of the test, you will identify how different words have different functions within a sentence. Look at the examples.

1 Der HUND isst Fleisch	Die Katze wird schlafen ☐ ☐ ☐ ☐
2 Martin FÄHRT gern Rad	Ich spiele nicht gern Tennis ☐ ☐ ☐ ☐ ☐
3 Mein Bruder fährt NACH London	Sein Onkel bleibt zu Hause ☐ ☐ ☐ ☐ ☐
4 Sie trägt einen SCHWARZEN Rock.	Der kleine Hund schläft ☐ ☐ ☐ ☐

Look at the words in CAPITAL LETTERS. What word in the second sentence has the same job as the word in CAPITAL LETTERS in the first sentence?

	Mark the correct answer with X	Do not write here
1 Der HUND bisst den Mann	Die ☐ Frau ☐ liest ☐ das ☐ Buch ☐	
2 Ich mag ERDKUNDE	Ich ☐ spiele ☐ Fussball ☐	
3 Meine Tante fliegt NACH Amerika	Sein ☐ Onkel ☐ bleibt ☐ zu ☐ Hause ☐	
4 Die SCHWARZE Katze trinkt Milch	Heute ☐ sieht ☐ der ☐ alte ☐ Mann ☐ fern ☐	
5 Ich habe einen EURO	Mein ☐ Vater ☐ hat ☐ graue ☐ Haare ☐	
6 MATHE ist langweilig	Schokolade ☐ ist ☐ schmackhaft ☐	
7 Wann STEHST du auf?	Wo ☐ wohnt ☐ das ☐ Kaninchen? ☐	
8 Am FREITAG habe ich Mathe	Paul ☐ hat ☐ im ☐ Juni ☐ Geburtstag ☐	
9 Wir fahren am Samstag IN die Stadt	Ich ☐ fahre ☐ mit ☐ dem ☐ Bus ☐	
10 Meine Schule ist MODERN	Mein ☐ Bruder ☐ ist ☐ sehr ☐ jung ☐	
11 Oma gibt MIR einen Bleistift	Opa ☐ gibt ☐ ihr ☐ zwölf ☐ Äpfel ☐	
12 Wir gehen ins KINO	Sie ☐ fahren ☐ mit ☐ dem ☐ Bus ☐	
13 NEHMEN Sie die erste Straße links	Nimm ☐ die ☐ Linie ☐ 101 ☐	
14 Man KANN hier schwimmen	Darf ☐ ich ☐ hier ☐ Golf ☐ spielen? ☐	
15 Geht's dir BESSER ?	Mir ☐ ist ☐ kalt ☐	

Go on to the next page

	Mark the correct answer with X	Do not write here
16 Hast du EINEN Bleistift?	Ich esse kein Fleisch ☐ ☐ ☐ ☐	
17 Maria kommt AUS Österreich	Paul ist vor dem Haus ☐ ☐ ☐ ☐ ☐	
18 WAS kostet die CD?	Wer hat angerufen? ☐ ☐ ☐	
19 AM MONTAG machen wir ein Picknick	Sie hört abends Musik ☐ ☐ ☐ ☐	
20 Katja möchte einen NEUEN Computer	Ich habe eine jüngere Schwester ☐ ☐ ☐ ☐ ☐	
21 Gestern hat er GESCHWOMMEN	Mein Vater ist nach Hamburg gefahren ☐ ☐ ☐ ☐ ☐ ☐	
22 Wir fahren AM WOCHENENDE heim	Morgens gehe ich zu Fuss zur Schule ☐ ☐ ☐ ☐ ☐	
23 Zwei alte MÄNNER trinken Kaffee	Die Frau spricht mit den alten Männer ☐ ☐ ☐ ☐ ☐ ☐ ☐	
24 DAS Haus ist ziemlich modern	Heute sieht das Mädchen fern ☐ ☐ ☐ ☐ ☐	
25 Der Junge hat einen Kuchen GEBACKEN	Wir sind nach London gefahren ☐ ☐ ☐ ☐ ☐	
26 WARUM liest du selten Bücher?	Wie heisst du? ☐ ☐ ☐	
27 Ein Brötchen KOSTET zwei Euros	Was machst du am Samstag? ☐ ☐ ☐ ☐ ☐	
28 Ist deine SCHWESTER intelligent?	Stefan spielt gern Gitarre ☐ ☐ ☐ ☐	
29 Seit wann LERNST du Deutsch?	Wir essen jeden Tag Fisch ☐ ☐ ☐ ☐ ☐	
30 Ich habe MEINE Hausaufgaben gemacht	Mutti hat ihre Tasche verloren ☐ ☐ ☐ ☐ ☐	

Check your work.
Do not turn to the next page.

Part 3 Rhyming words

In this part of the test, you will identify words that rhyme. Not all words that rhyme look the same. Try to find the words sound most like the word in the first column:

1	mähen		Gegen ☐	viele ☐	gehen ☐	ziehen ☐
2	sich		Stück ☐	Stich ☐	Strick ☐	Streich ☐
3	vier		Feuer ☐	Feier ☐	teuer ☐	Tier ☐

Part 3 Rhyming words

			Mark the correct answer with X				Do not write here
1	Fähre		Ehre ☐	Fahrt ☐	Vater ☐	fahre ☐	
2	sehen		Nähe ☐	Ecke ☐	Seele ☐	nähen ☐	
3	Wald		Wand ☐	kahl ☐	kalt ☐	Wort ☐	
4	der		Dauer ☐	entfernt ☐	Haar ☐	Bär ☐	
5	enger		Menge ☐	länger ☐	ernst ☐	Engel ☐	
6	fest		Feind ☐	lässig ☐	läßt ☐	los ☐	
7	Welt		Wort ☐	Held ☐	gelb ☐	Herz ☐	
8	ist		frißt ☐	Ost ☐	heißt ☐	Durst ☐	
9	Stahl		stehlen ☐	Halle ☐	Ball ☐	Fälle ☐	
10	März		hart ☐	Salz ☐	Pest ☐	Herz ☐	
11	enden		wandern ☐	Händen ☐	Länder ☐	Sünden ☐	
12	wahr		klar ☐	sparen ☐	mehr ☐	sehr ☐	
13	Schuh		Schule ☐	Zoo ☐	zu ☐	Stau ☐	
14	Männer		dünner ☐	Renner ☐	rennen ☐	kennen ☐	
15	Türen		Toren ☐	fahren ☐	Ohren ☐	führen ☐	
16	Blicks		fix ☐	Tisch ☐	Blatt ☐	Fuchs ☐	
17	man		sein ☐	Sahne ☐	kann ☐	krank ☐	
18	hier		heil ☐	mir ☐	mehr ☐	heim ☐	
19	Ohr		vor ☐	Feier ☐	Ort ☐	Form ☐	
20	hin		Lohn ☐	Sinn ☐	dünn ☐	Heim ☐	
21	hält		Hut ☐	weit ☐	Welt ☐	gilt ☐	
22	sein		grün ☐	meist ☐	stehlen ☐	mein ☐	
23	dir		Mauer ☐	Bier ☐	Bein ☐	dein ☐	
24	nehmen		kommen ☐	kämen ☐	sehen ☐	nagen ☐	
25	Kräfte		Liebe ☐	habe ☐	Kraft ☐	Hefte ☐	
26	Wein		Rhein ☐	Wien ☐	Miene ☐	Ren ☐	
27	suchen		Bücher ☐	sucht ☐	Kuchen ☐	Küche ☐	
28	Leute		launisch ☐	Zeug ☐	Laute ☐	heute ☐	
29	mehr		für ☐	sehr ☐	Haare ☐	vor ☐	
30	schön		Fön ☐	schon ☐	Schaum ☐	Blume ☐	
						Page total	

Check your work.
Do not turn the page.

Part 4 Learning new words

In this part of the test, you will learn some new words.
You will then have the opportunity to show how many of the new words you have learned, by choosing the correct word from a selection of words.

der Regenschirm

der Leuchtturm

der Koffer

das Messer

die Brille

die Erde

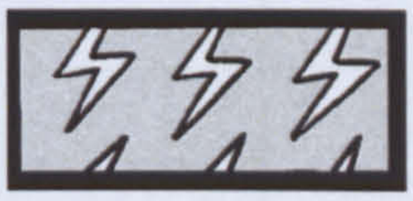
das Streichholz

der Wasserhahn

der Schlüssel

die Ente

die Ampel



das Gewitter

das Blatt

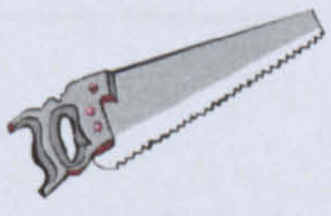
der Baum

das Flugzeug

der Korb

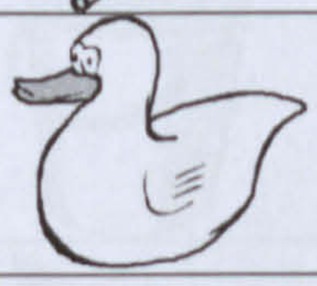
das Geschenk

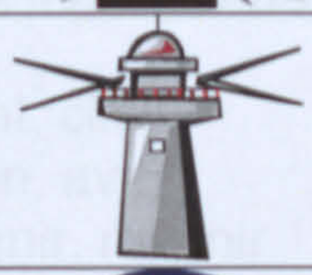
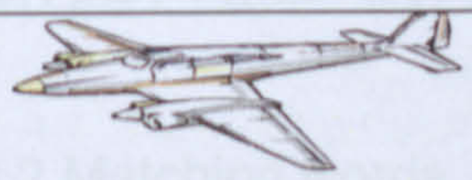
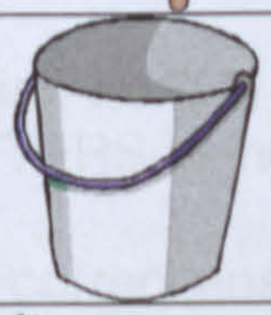
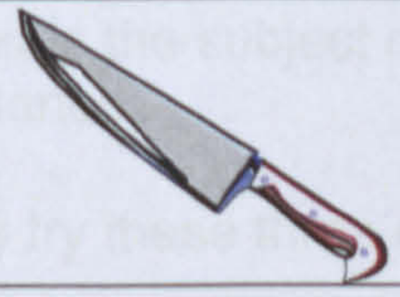
der Sessel



die Säge

der Eimer

		Choose the correct word. Write a, b, c or d in the answer column	Write your answer here	Do not write here
1		e) das Blatt f) die Brille g) das Blut h) die Brühe		
2		e) das Bankett f) der Korb g) der Balkon h) der Kürbis		
3		e) die Schüssel f) das Schloss g) der Schlüssel h) der Schuss		
4		e) das Blatt f) der Baum g) die Platte h) die Pflaume		
5		e) die Süße f) die Käse g) der Kocher h) der Koffer		
6		e) das Gift f) das Gerät g) das Geschenk h) das Gelenk		
7		a) das Hähnchen b) der Handel c) das Wasserrad d) der Wasserhahn		
8		a) das Streichholz b) der Matsch c) das Sternbild d) die Masche		
9		a) das Dach b) die Ente c) das Dock d) der Engel		
10		a) die Tonne b) das Wetter c) die Gebirge d) das Gewitter		
			Total for page	

		Choose the correct word. Write a, b, c or d in the answer column	Write your answer here	Do not write here
11		e) die Träne f) der Bauer g) der Trieb h) der Baum		
12		e) der Regenmantel f) der Sonnenschirm g) der Regenschirm h) der Sonnenstrahl		
13		e) der Apfel f) die Ampel g) das Licht h) die Lampe		
14		e) der Fernsehturm f) der Leuchtschirm g) die Forschung h) der Leuchtturm		
15		e) die Erde f) die Ebene g) das Wort h) die Wolke		
16		e) der Saft f) die Sahne g) die Säge h) die Salbe		
17		a) das Schlagzeug b) die Pläne c) das Flugzeug d) der Flüchtling		
18		a) der Armleuchter b) der Sessel c) die Armatur d) der Setzer		
19		a) der Eimer b) das Eisen c) das Bukett d) der Bunker		
20		a) das Messer b) die Kneipe c) der Kniff d) der Meister		

Appendix 9 Instructions - Script for Language Test - French

1 Part 1

Turn to page 3 of your test booklet.

In this part of the test, you will hear some French words. You should identify the word on your test paper which most closely resembles the word you hear.

2 Now we will look at some examples:

usine, usine

3 The correct answer is : usine
Listen again
usine.

Now do the following three examples in your test booklet.

client, client
avion, avion
revenir, revenir

The correct answers are
client
avion
revenir

Now turn to page 4.
Listen to the words and complete the questions.
(insert part 1 main test French)

Part 2 Matching words
Now turn to page 5
In this part of the test, you will learn something about the different jobs words can do in sentences.
Look at the first group of sentences, and pay special attention to the words printed in capital letters. We will call these words: KEY WORDS.

Which word in the second box has the same job as the word in CAPITAL LETTERS in the first box?

The correct answer is chat.
chien is the subject of the first sentence, chat is the subject of the second sentence.

Now try these three examples on your own.

(pause)

No.2 The correct answer is joue. aime is a verb and joue is a verb

no.3 The correct answer is à la. Both À and à la tell you where something is happening.

No 4. The correct answer is petit. Both petit and noir are describing words. We call them adjectives.

Now turn to page 6. Complete as many of the questions as you can. Stop when you reach the end of page 7.

(pause)
Stop.
Now turn to page 8
Part 3 Rhyming words
In this part of the test, you will identify words that rhyme. Not all words that rhyme look the same. Try to find the words sound most like the word in the first column

Try these three examples on your own.

The correct answers are :
joue and chou
part and car
nation and passion

Now turn to page 9.
Complete as many of the answers as you can.
When you have reached the end of page 10, check your answers in this section, then put your pen down.

Part 4
In this part of the test, you will be asked to remember some new words.
You will hear some words and see pictures which match the words.
Try to remember as many of the words as you can.

(show words and pictures twice)

You now have 4 minutes to look at the words on page 11. You may not write anything down. Try to remember as many words as you can.

(4 minute pause)

Now turn to page 12. Look at the picture and try to identify the word that you have learned. Choose the a, b, c or d. Write your answer in the box, Write a, b, c or d.

This is the end of the test. Put your pen down, and close your answer booklet.

Appendix 10 Instructions - Script for Language Test - German

1 Part 1

Turn to page 3 of your test booklet.

In this part of the test, you will hear some German words. You should identify the word on your test paper which most closely resembles the word you hear.

2 Now we will look at some examples:

Fabrik, Fabrik
3 The correct answer is : Fabrik
Listen again
Fabrik.

Now do the following three examples in your test booklet.

Kunde, Kunde
Werbung, Werbung
Zukunft, Zukunft

The correct answers are
Kunde,
Werbung,
Zukunft

Now turn to page 4.
Listen to the words and complete the questions.
(insert part 1 main test French)

Part 2 Matching words
Now turn to page 5
In this part of the test, you will learn something about the different jobs words can do in sentences.
Look at the first group of sentences, and pay special attention to the words printed in capital letters. We will call these words: KEY WORDS.

Which word in the second box has the same job as the word in CAPITAL LETTERS in the first box?

The correct answer is chat.
chien is the subject of the first sentence, chat is the subject of the second sentence.

Now try these three examples on your own.

(pause)

No.2 The correct answer is joue. aime is a verb and joue is a verb

no.3 The correct answer is à la. Both À and à la tell you where something is happening.

No 4. The correct answer is petit. Both petit and noir are describing words. We call them adjectives.

Now turn to page 6. Complete as many of the questions as you can. Stop when you reach the end of page 7.

(pause)
Stop.
Now turn to page 8
Part 3 Rhyming words
In this part of the test, you will identify words that rhyme. Not all words that rhyme look the same. Try to find the words sound most like the word in the first column

Try these three examples on your own.

The correct answers are :
joue and chou
part and car
nation and passion

Now turn to page 9.
Complete as many of the answers as you can.
When you have reached the end of page 10, check your answers in this section, then put your pen down.

Part 4
In this part of the test, you will be asked to remember some new words.
You will hear some words and see pictures which match the words.
Try to remember as many of the words as you can.

(show words and pictures twice)

You now have 4 minutes to look at the words on page 11. You may not write anything down. Try to remember as many words as you can.

(4 minute pause)

Now turn to page 12. Look at the picture and try to identify the word that you have learned. Choose the a, b, c or d. Write your answer in the box, Write a, b, c or d.

This is the end of the test. Put your pen down, and close your answer booklet.

Appendix 11 Comments from Pilot group - French

Comments from year 10 students on the first phase of the French aptitude test

Part 1 Identifying words

Mhairi	20	I thought it was good and just the right length but too much time given.
Ryan	20	Needs to be speeded up. Some extra words? Some harder ones towards end
Kate	20	I thought it was a bit long because of the gaps in the questions. It was quite easy.
Jamie		
Beth	20	It took too long because it repeated the words and had long pauses.
Alfie	20	Too long, and you got bored
Victoria	20	It was too long and slow. Needs to be shorter and a bit quicker.
Lauren	20	Gaps between questions were too long too many questions
Natalie	20	I thought it was easy but a bit too long – gaps were quite long.
Alice	20	fine
Emily	20	too long with too many pauses/gaps
Carly	19	I thought it was too long and the questions could be cut down a bit because people will lose concentration by the end of it.
Lois	19	the gap between each question was too long.
Joseph	20	A bit long. Maybe the gap between the number and the answer to be shortened
Charlotte	20	Very good idea, but was too long – needs to be cut down to not as much questions.
Ashleigh	20	was easy but too long – needs to be shorter.
Jessica	20	I thought it was easy but also a little too long.

Part 2 Matching Words

Mhairi	27	It was good and made you think about which words do what in a sentence.
Ryan	27	Identifying significant points in sentence structure Few less questions and sped up easier? it already says whether it is a verb, noun etc
Kate	25	It was good, a bit harder.
Jamie		
Beth	23	Quite difficult!
Alfie	25	was fine, not too long or too short
Victoria	23	It was a bit tricky and quite long again. But there was plenty of time to answer it.
Lauren	26	Quite tricky – but very good for catching out
Natalie	18	Part 2 was very long, maybe only the first page was enough. The gaps were too long. Was a bit hard.
Alice	25	too long and maybe a bit too hard for year 8. Also should be no trick questions.
Emily	30	too much time given Capital words need to stand out more so easier to identify.
Carly	25	Quite easy, but lots of questions again.
Lois	20	I think there was too many questions.
Joseph	27	Good, not too hard
Charlotte	18	Good idea, but was quite difficult.
Ashleigh	18	I found it a little hard because the same words were used for eg hiver and été.
Jessica	21	30 questions was too many questions to answer and we had too

		much time to answer these.

Part 3 Rhyming words

Mhairi	24	I thought it was to test whether you know the sounds of words, I thought it was slightly too long.
Ryan	16	too long! words are pretty easy
Kate	23	I think there was too many questions, took too long.
Jamie	21	I think this section was good. It was quite hard but there was enough time to answer all the questions.
Beth	29	Too long. Could be shorten down a little because it might become boring. Good idea though!
Alfie	23	okay – maybe need more time
Victoria	28	It was quite short and quite easy so it needs more questions to it. It was good but it needs to be more challenging.
Lauren	16	Too many questions
Natalie	22	Had long gaps and was quite harder which was better. Some questions were not clear.
Alice	27	Bit too long. Also quite hard for year 8
Emily	28	too long as too many questions
Carly	23	Enough time given, but many questions make people lose concentration.
Lois	32	I couldn't see much problems with this one.
Joseph	29	Quite hard. Maybe a little more time could be given.
Charlotte	20	good idea, need to be cut down a lot. Made you think.
Ashleigh	18	was hard because some students might not know how to say the word in the head, let alone speak it. Could be shorter.
Jessica	23	Words were very familiar, too many questions – needs to be cut down.

Part 4 Learning new words

Mhairi	20	I think some of the words were difficult, but there was enough time to learn them. The questions were quite easy because you didnt have to write the words down.
Ryan	20	too long to learn lot or words repeated, find out what one is and can disallow it from other questions
Kate	18	Too long to memorise the words as the questions were multiple choice.
Jamie	17	This one was good for remembering. It was easy but it was challenging to remember them all but it was good.
Beth	20	Enjoyed this part, although 4 mins is a long time to wait and the words were easy. For year 8s it should be a good idea!
Alfie	20	too easy. Too much time in remembering words. More words needed
Victoria	18	It was good as it was very easy to complete but there is a lot of time to practice.

Lauren	20	Too much time given for remembering the words – probably quite good for people who's quite new to the words. Time given for remembering should be cut down.
Natalie	18	Wasn't that familiar but the questions were the right length. The gaps were better. The time to learn them was enough.
Alice	19	Fine
Emily	19	Some words were too similar ie la scie and le seau as well as leaf and tree being very similar. too much learning time after two times of seeing the words.
Carly	12	The words were all not too easy or not too hard. There was enough time to learn them and there wasn't too many.
Lois	20	I found it easy, but I think there was too much time given. For year 8 students I think the words should have been a bit easier.
Joseph	20	Words are good, not too hard. Questions good, some harder than others
Charlotte	20	Really liked it – thought it was a good end for a test. It got you thinking but it was fun at the same time. Could be a bit more challenging.
Ashleigh	18	easy to memorise and easy to learn them, need more time to answer questions and vary some of the answers
Jessica	16	Words were too easy and we had too much learning time.

Appendix 12 Comments from Pilot group – German

Comments from year 10 students on the first phase of the German aptitude test

Part 1 Identifying words

Steven	20	Instructions were easy to follow, to improve them, try to use a static-proof mic as the static was terrible. Easy for me, you have the words but they need to know the pronunciation. Those where someone else's voice, harder to understand.
Megan	20	Instructions were easy to follow Easy
Louise	18	The instructions were clear. I thought this part was easy.
Amy	20	easy to follow instructions easy
Leaha	20	Instructions were clear and easy
Rebecca	20	I believe the instructions were quite easy to follow – given the examples.
Charlotte	19	Yes, I think the instructions were very clear, I understood them.
Siam	18	Instructions easy to follow quite easy – year eights would find it harder preferred it if it was your voice – would be easier to hear the pronunciation.
Emily	19	Instructions were easy to follow. Easy – maybe harder for people who haven't heard different voices
Simon	20	The instructions were good and clear to understand. Quite easy because the words are there, but may be difficult for younger ages.
Natasha	18	instructions were easy to follow, and easy to understand. test was easy for year 8 it may be harder
Michael	18	Instructions followed easily easy
Natalie	20	instructions easy to follow easy
Emma	19	The instructions are easy to follow and understand This part was easy.

Part 2 Matching Words

Steven	23	Clear instructions People need to consider the pronunciation of the words and the types of words
Megan	25	Instructions were clear. Harder than the first bit but not that hard
Louise	24	The instructions were clear but some word were the most difficult.
Amy	27	easy instructions test was a little bit difficult
Leaha	26	Slightly harder.
Rebecca	28	Easy-peasy :) I didn't find it any harder with another voice – although others might
Charlotte	13	I thought part 2 was quite hard because i couldn't understand where the object was in the sentence.
Siam	26	very easy – I found it quite easy instructions clear I liked this part of the test

Emily	27	Get harder as the structure changed. A bit too much time as started to doubt.
Simon	19	clear and easy to understand, could be easier to understand if there was more examples. maybe you could show which word had to be changed more.
Natasha	26	Clear instructions. Test was hardest, but still quite easy.
Michael	26	Clear instructions Slightly harder
Natalie	28	clear instructions harder than part 1
Emma	27	These instructions were clear and the test was harder than part one.

Part 3 Rhyming words

Steven	37	People may struggle on word pronunciation
Megan	28	Clear instructions. Had to think how the words are said.
Louise	31	Wider vocabulary and understanding sounds helped here. Other than difficult words. Most was quite easy.
Amy	27	easy instructions difficult, because I couldn't pronounce the words properly.
Leaha	38	Easier than the previous section
Rebecca	34	Slightly harder, but, matching letters and sound phrases might help, sometimes.
Charlotte	13	There are words here I haven't seen before so I had trouble pronouncing them.
Siam	31	I found this part of the test the hardest The instructions were clear It was hard to pronounce the words if they were not known.
Emily	30	Alright but words were difficult as pronouncing them was hard as didn't recognise them.
Simon	35	Well explained Well described and organised well.
Natasha	36	Clear, understandable instructions. Test was easy, but words were rather difficult to pronounce.
Michael	27	Clear instructions quite hard
Natalie	36	hardest because unfamiliar words and don't know pronunciations
Emma	35	I thought this was difficult because you have to think about what the word sounded like.

Part 4 Learning new words

Steven	20	Easy to learn and remember, Instructions not very clear, may have to change. Easy multiple choice Should have a der, die, das on the word e.g. Der, Die, Das etc.1
Megan	20	Time too long! Clear instructions Easy
Louise	20	This section was easy. You don't need as much time to learn the words.
Amy	20	easy. need less time to learn words. watch slideshow two times and 2 minutes to look at them.
Leaha	20	Easy. Slightly too long to learn the words though.
Rebecca	19	this was easier for me, 'cause I knew some words, but this is probably harder for younger years

Charlotte	16	this part was easy because we had a lot of time to remember the words and there were multiple choice answers which is easier.
Siam	18	easy instructions I liked this part too long to learn the words quite easy I liked the multiple-choice
Emily	20	Too long to learn words Two minute times slide show Two minutes for words Good with pictures to recognise words and makes harder with different words next to the pictures that were also on the sheet.2
Simon	18	Easy but may be difficult for people with bad memories and concentration
Natasha	20	need to understand not to turn the page over. (Give clear instructions) Clear instructions. rather easy, unless a pupil has a weak memory.
Michael	20	instructions a bit confusing easy
Natalie	20	too long to learn words easy because familiar vocabulary
Emma	19	this was easy but there was too long to learn the words.

[1] Steven suggested that instead of having multiple choice, that you could just put the der, die, das and the students have to fill in the word, or show the picture, and all that is required is to complete the der, die or das.

[1] Emma is referring to the choice of words – using words which were also on the vocab learning sheet, eg Brille and Blatt

Appendix 13 Materials used in Observation task – French

Future tense reference sheet French

Future tense

The future tense is used in French to express an idea or an action which will take place in the future. It is formed by using the present tense of *aller* and the *infinitive.*

Who?

1 person singular	je	I
2nd person singular	tu	you
3rd person singular	il elle	he, it she, it
1st person plural	nous	we
2nd person plural	vous	you
3rd person plural	ils elles	they

aller
In the future tense, the present tense of **aller** is used as an auxiliary verb

je	vais
tu	vas
il elle	va
nous	allons
vous	allez
ils elles	vont

Sentence structure
Use the column structure as laid out below. Note that the auxiliary verb (werden) is in the second column, and the infinitive moves to the end of the sentence.

Who?	**aller**	**infinitive**	**What?**
je	vais	manger	une pomme
le chien	va	voir	un chat
nous	allons	aller	au cinéma
mes parents	vont	dormir	jusqu'à midi

Common verbs - French

Français	English
travailler	to work
sortir	to go out
laisser	to leave
chanter	To sing
visiter	to visit
laver	to wash
goûter	to taste
rester	to stay
manger	to eat
aller	to go
regarder	to watch
danser	to dance
oublier	to forget
chercher	to look for
donner	to give
apprendre	to learn
acheter	to buy
choisir	to choose
venir	to come
lire	to read
faire	to make, do
arriver	to arrive
nettoyer	to clean
écrire	to write
recevoir	to receive
courir	to run
cuire	to cook
partager	to share
dîner	to have dinner
étudier	to study
jouer	to play
danser	to dance
retrouver	to meet
fermer	to close
boire	to drink
plonger	to dive
jeter	to throw
entrer	to enter
voler	to steal
habiter	to live

Gap fill activity - French

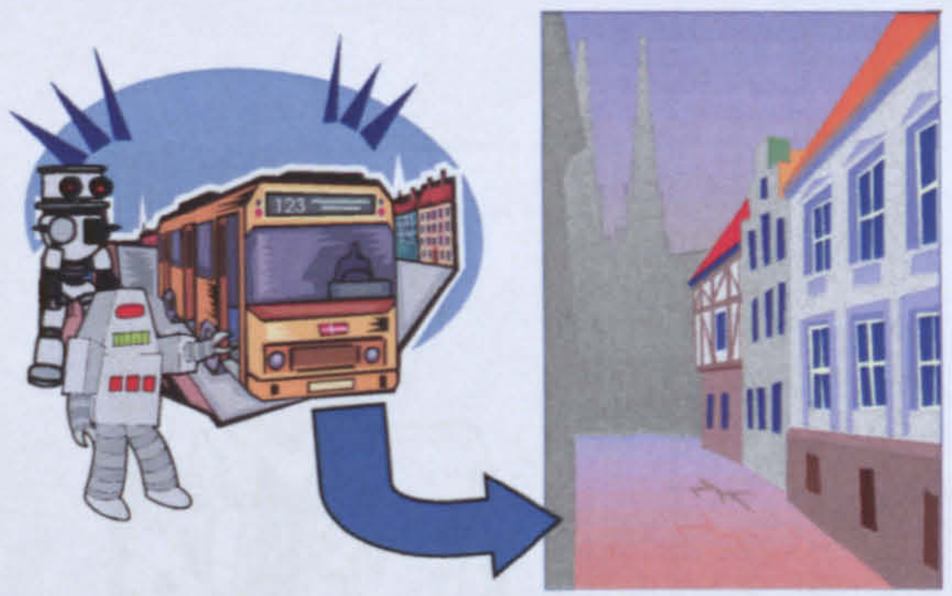
Complète les phrases

1 je _____ _____ dans le jardin.	*travailler*
2 tu _____ _____ de la gare.	*sortir*
3 il _____ _____ son sac dans le train.	*laisser*
4 elle _____ _____ devant sa classe.	*chanter*
5 nous _____ _____ Londres.	*visiter*
6 vous _____ _____ la voiture.	*laver*
7 ils _____ _____ de la confiture.	*goûter*
8 elles _____ _____ chez elles.	*rester*
9 il _____ _____ un hamburger.	*manger*
10 nous _____ _____ à Paris.	*aller*
11 Vous _____ _____ la télé ce soir?	*regarder*
12 je _____ _____ à la boum ce weekend.	*danser*
13 _____ - tu _____ ta valise?	*oublier*
14 elle _____ _____ son billet.	*chercher*
15 elle _____ _____ un cadeau.	*donner*
16 _____ - tu _____ l'espagnol?	*apprendre*
17 nous _____ _____ des BDs.	*acheter*
18 elles _____ _____ des livres.	*choisir*
19 il _____ _____ cet après-midi.	*venir*
20 Qu'est ce que tu _____ _____ ?	*lire*
21 Demain ils _____ _____ du vélo.	*faire*
22 je _____ _____ à neuf heures.	*arriver*
23 Cendrillon _____ _____ la cuisine.	*nettoyer*
24 _____ vous _____ une lettre ce soir?	*écrire*
25 vous _____ _____ de l'argent?	*recevoir*
26 nous _____ _____ vite.	*courir*
27 je _____ _____ de la viande.	*cuire*
28 elles _____ _____ la chambre.	*partager*
29 il _____ _____ chez sa grand-mère.	*dîner*
30 Vous _____ _____ les maths?	*étudier*
31 elle _____ _____ au tennis.	*jouer*
32 elles _____ _____ demain.	*danser*
33 vous _____ _____ les copains.	*retrouver*
34 nous _____ _____ la porte.	*fermer*
35 _____-tu _____ du lait?	*boire*
36 Quand est-ce que nous _____ _____?	*plonger*
37 _____ tu _____ une pierre?	*jeter*
38 je _____ _____ dans la salle.	*entrer*
39 Comment _____ vous _____ les bijoux?	*voler*
40 il _____ _____ en France.	*habiter*

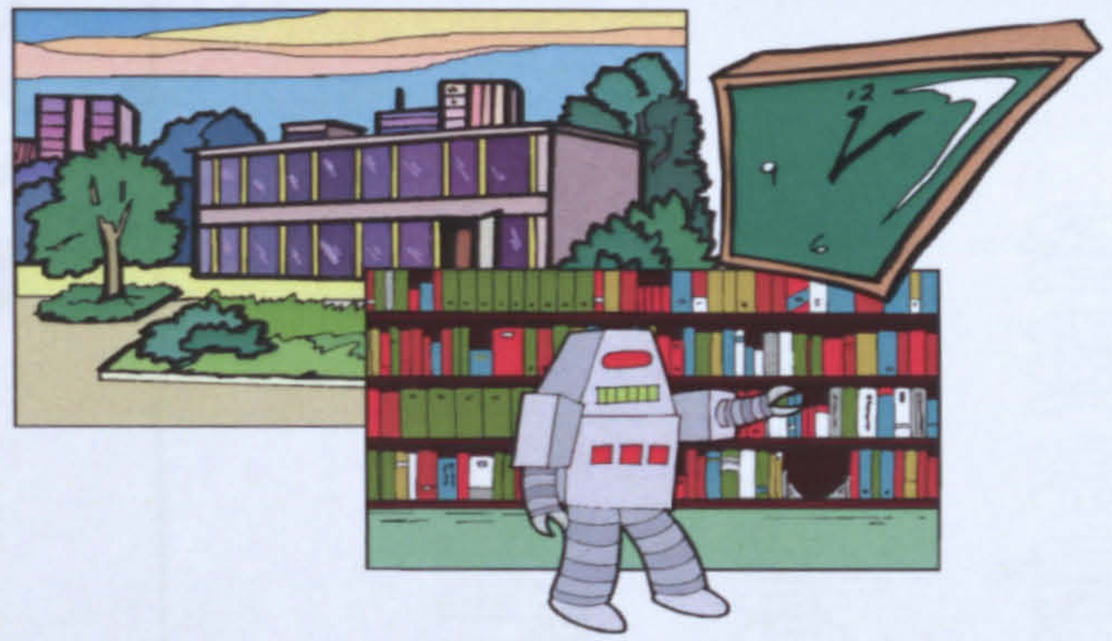
Word order activity- French

1 vais je en France voyager
2 des biscuits tu préparer vas
3 de l'argent dépenser il va
4 faire du camping en juillet nous allons
5 aller vous allez à Southend ?
6 mon chien va il promener
7 manger vont ils de la pizza
8 vous acheter des timbres allez
9 va elle le vieux château visiter
10 de la guitare jouer lundi nous allons
11 en train vont en ville ils ?
12 sortir nous jeudi allons
13 habiter vas à Rouen tu
14 du lait demain je boire vais
15 venir elle après le collège va
16 une veste vais je trouver
17 ma mère aider toute la journée je vais
18 le lapin des carottes manger va
19 une pizza la fille va commander
20 partir allez à 10 heures vous

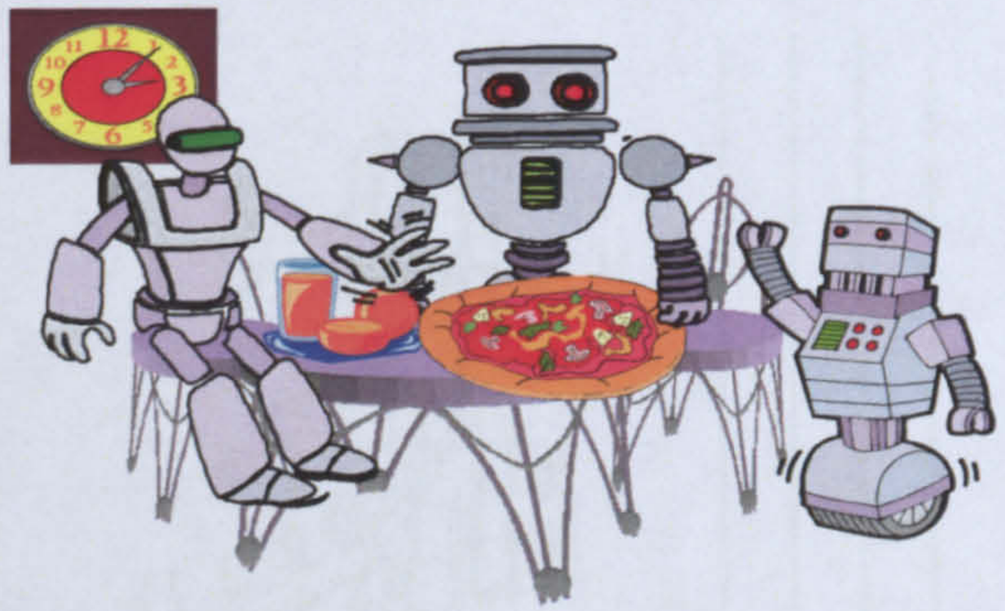
Picture Narrative Activity (group)



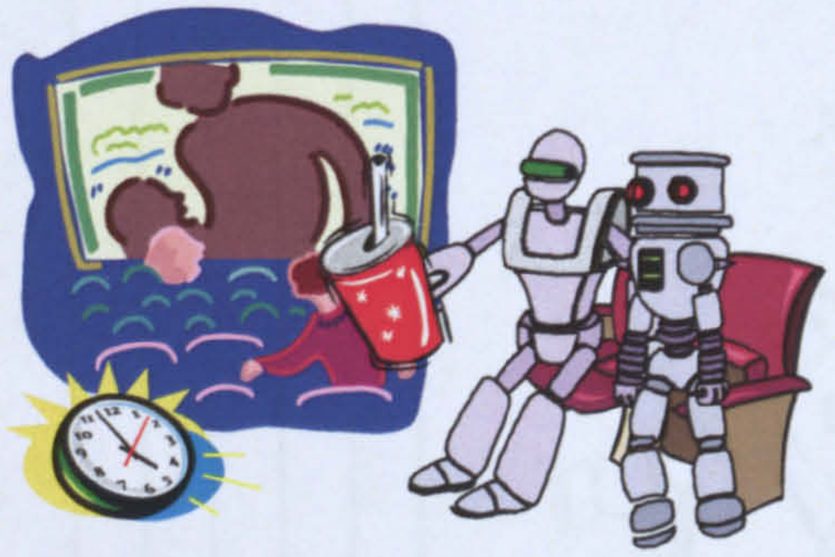
rencontrer un ami
aller en ville



aller à la bibliothèque
choisir un livre



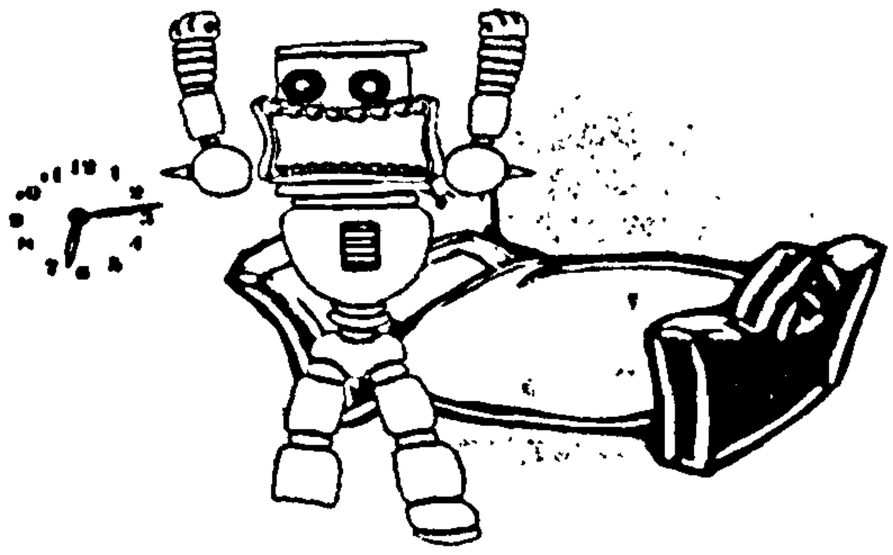
aller au café
manger une pizza
boire du jus d'orange

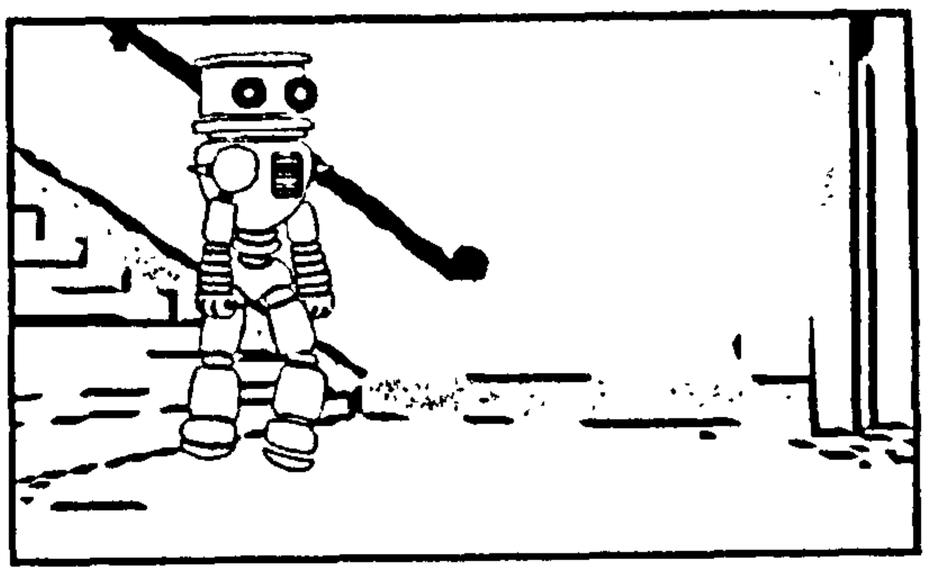


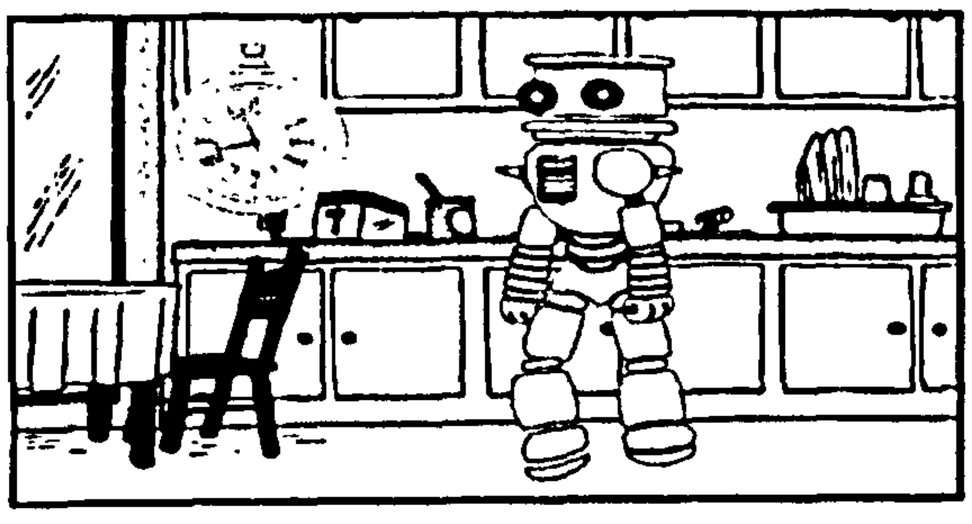
aller au cinéma
boire du coca
voir un film

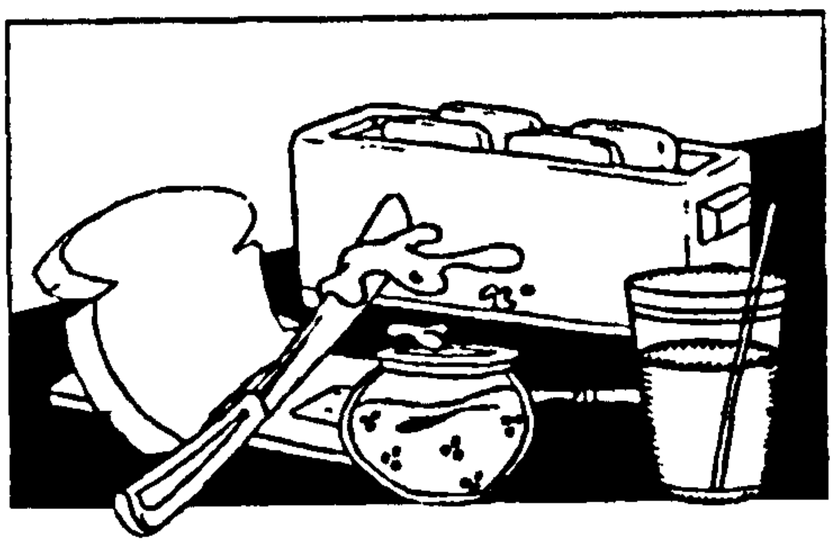
Picture narrative (individual)

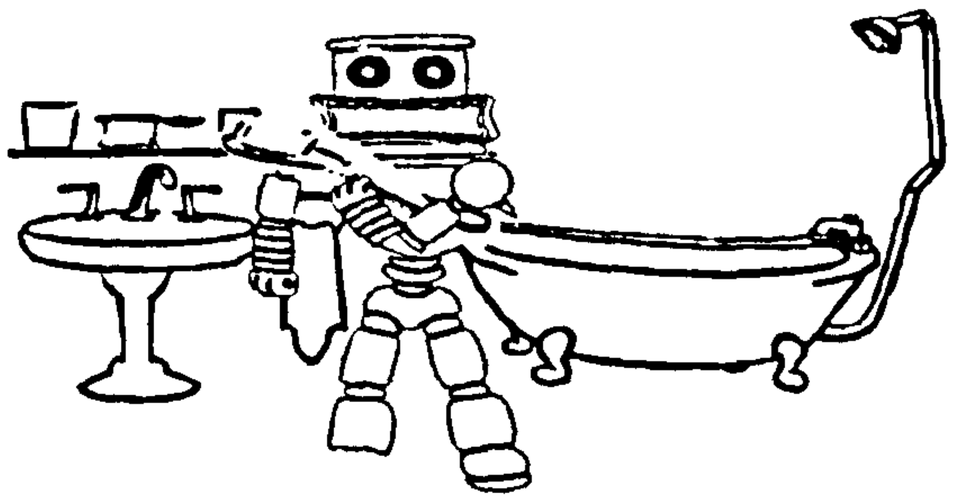
Qu'est ce que Robert le robot va faire aujourd'hui?

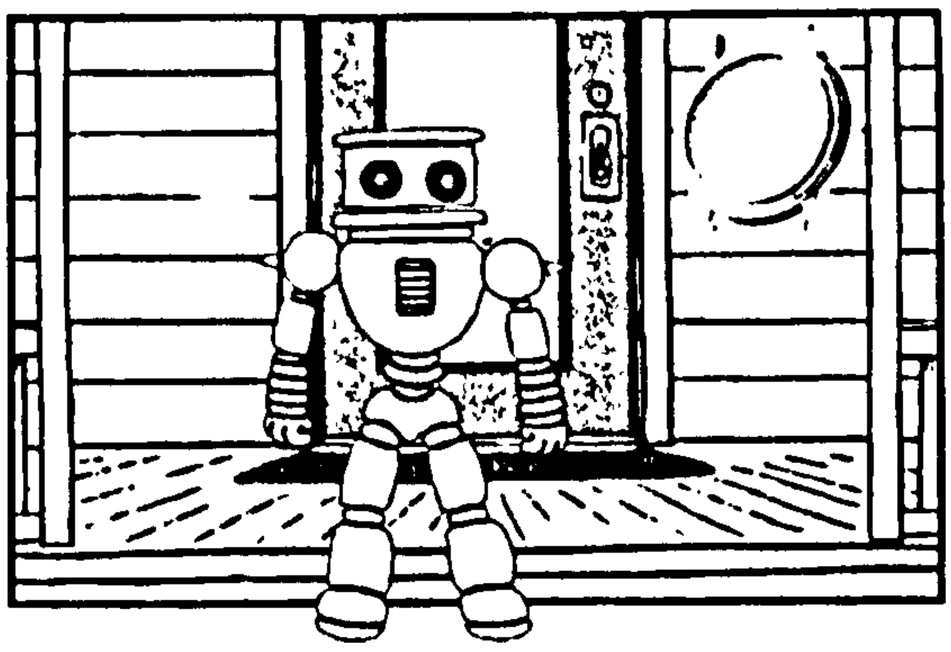


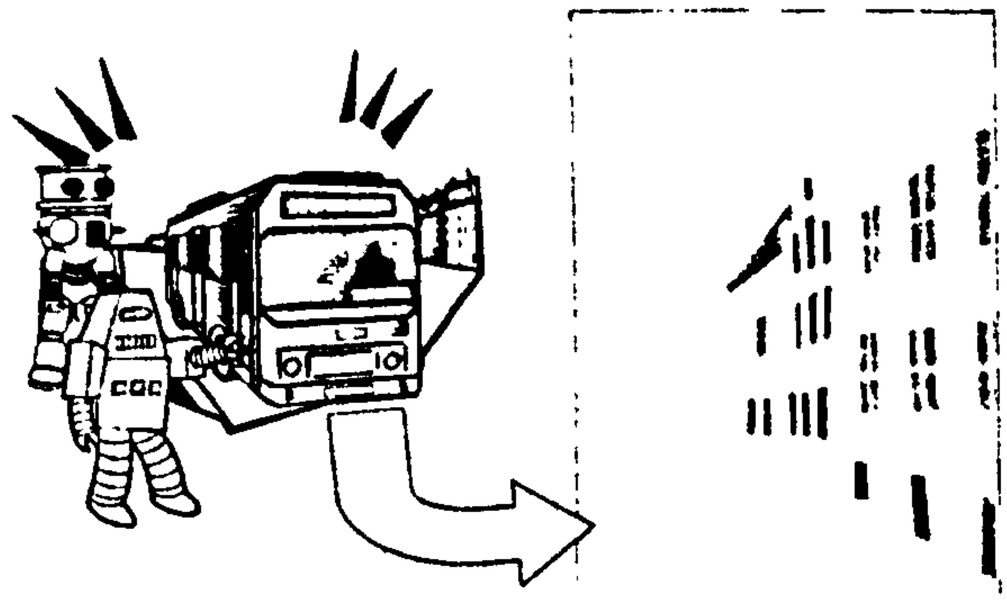


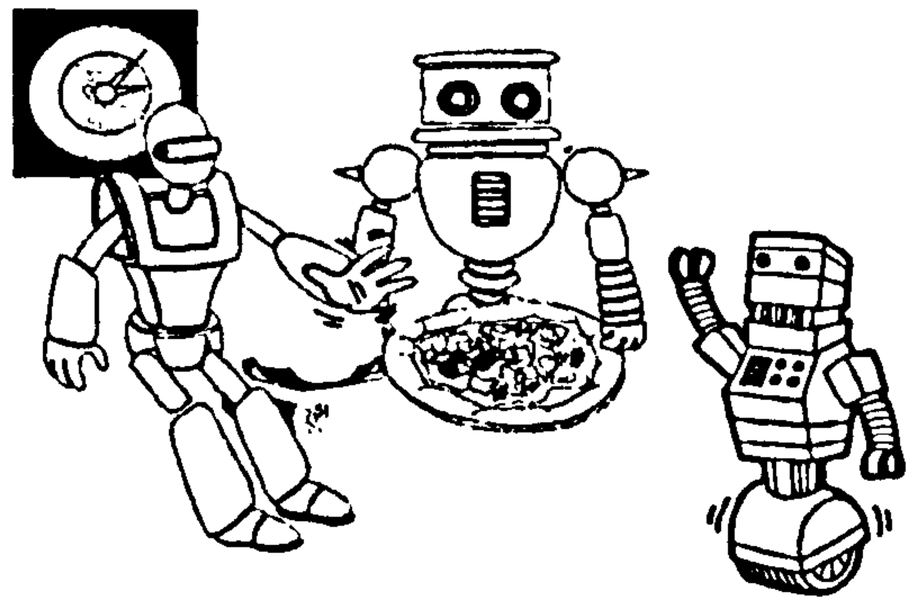


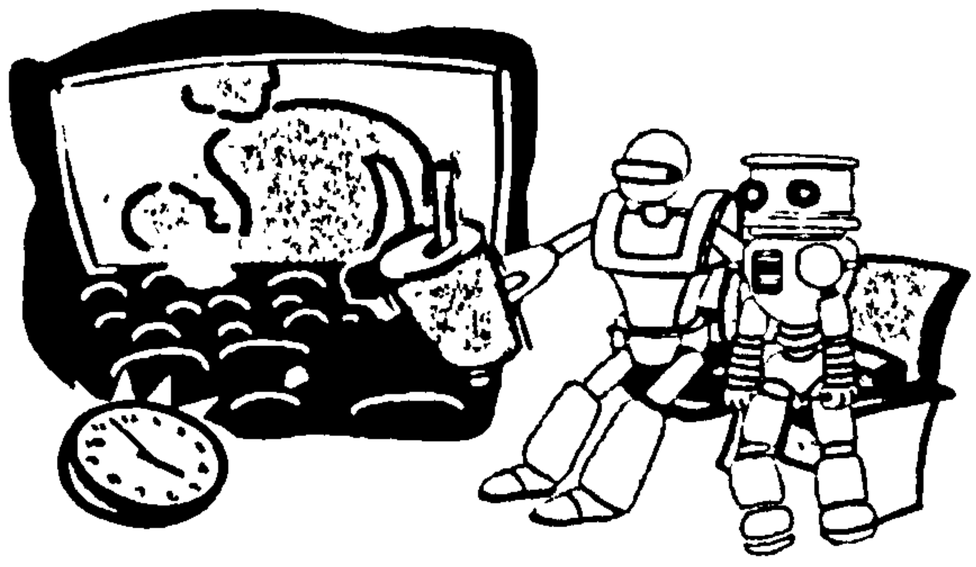


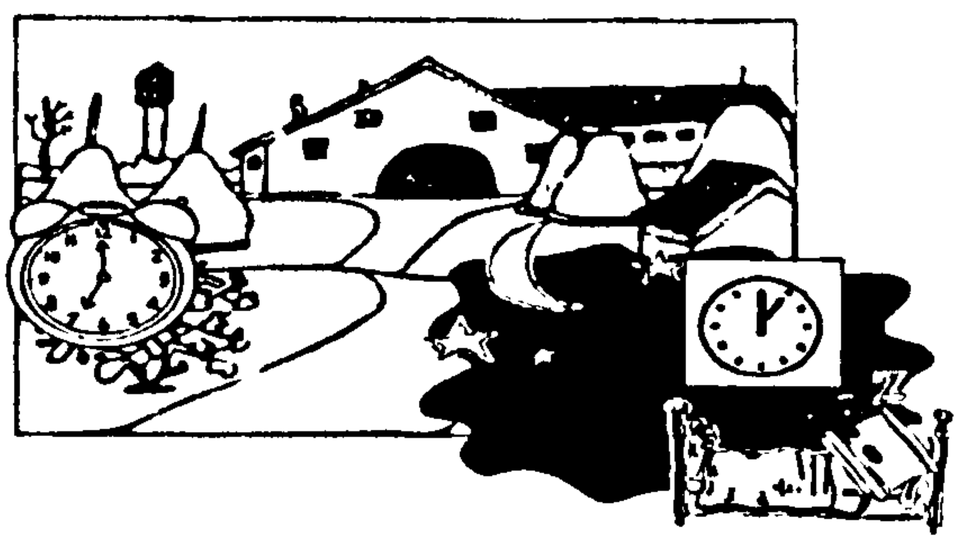












Future tense Reference sheet German

Future tense

The future tense is used in German to express an idea or an action which will take place in the future. It is formed by using the present tense of *werden* and the *infinitive.*

Who?

1 person singular	ich	I
2nd person singular	du	you
3rd person singular	er sie es	he, it she, it it
1st person plural	wir	we
2nd person plural	ihr	you
2nd person polite and plural	Sie	you
3rd person plural	sie	they

werden

In the future tense, the present tense of werden is used as an auxiliary verb

ich	werde
du	wirst
er sie es	wird
wir	werden
ihr	werdet
Sie	werden
sie	werden

Sentence structure

Use the column structure as laid out below. Note that the auxiliary verb (werden) is in the second column, and the infinitive moves to the end of the sentence.

Who?	**werden**	**What?**	**infinitive**
ich	werde	einen Apfel	essen
Der Hund	wird	eine Katze	sehen
Wir	werden	ins Kino	gehen
Meine Eltern	werden	bis Mittag	schlafen

Using time phrases:

If you wish to use a time phrase, this can be inserted at the beginning of the sentence. Note that the auxiliary verb still comes second, and the infinitive is still at the end of the sentence.

When?	**werden**	**who?**	**what?**	**infinitive**
um 9 Uhr	werde	ich	einen Film	sehen
Im Sommer	werden	wir	ins Kino	gehen
Nach der Schule	werden	die Kinder	bei McDonalds	essen
um 6 Uhr	wird	er	eine Zeitung	lesen

Common Verbs

Deutsch	English
arbeiten	to work
ausgehen	to go out
austragen	to deliver
backen	to bake
besichtigen	to visit
bestellen	to order
besuchen	to visit
bleiben	to stay
essen	to eat
fahren	to go (travel)
fernsehen	to watch television
fotografieren	to photograph
frieren	to freeze
frühstücken	to have breakfast
geben	to give
gewinnen	to win
kaufen	to buy
kegeln	to bowl
kommen	to come
lesen	to read
machen	to make, do
mitkommen	to come (with)
radfahren	to cycle
reiten	to ride
sammeln	to collect
schwimmen	to swim
segeln	to sail
skifahren	to ski
sparen	to save (money)
spazieren gehen	to go for a walk
spielen	to play
tanzen	to dance
treffen	to meet
treiben	to do (sport)
trinken	to drink
üben	to practice
verdienen	to earn
vergessen	to forget
waschen	to wash
wohnen	to live

Gap fill activity

Name:_____

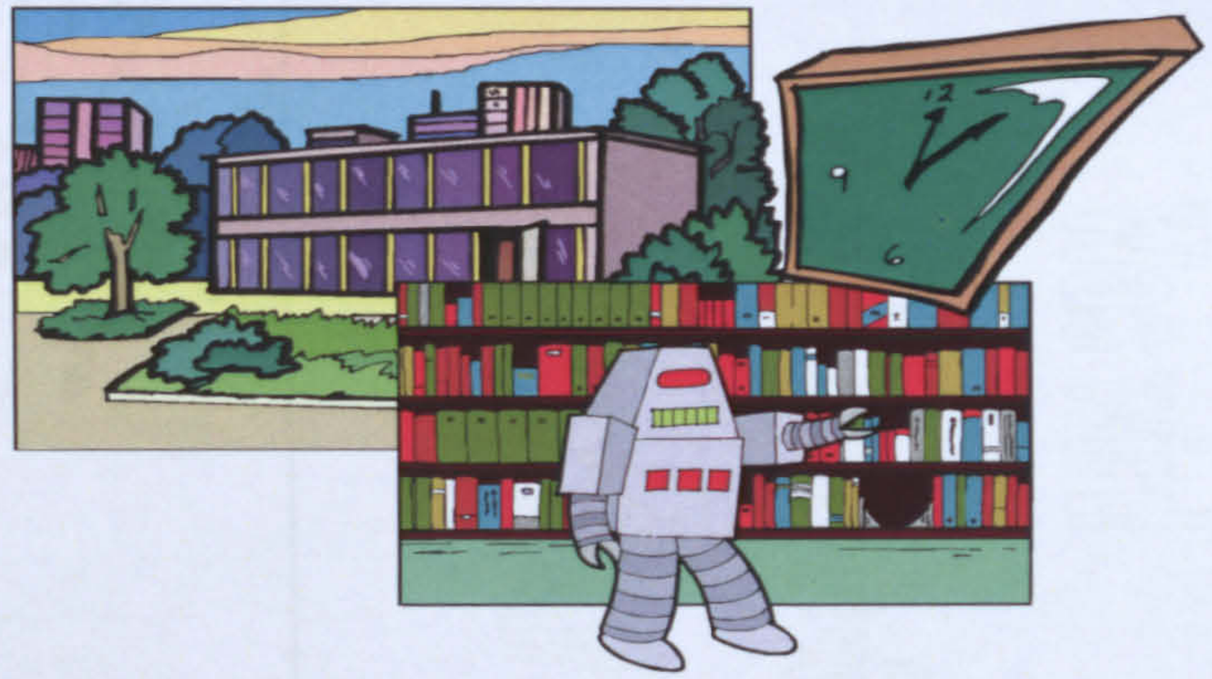
Ergänze die Lücken

1 ich _____ Pizza _____	*essen*
2 du _____ Cola _____	*trinken*
3 er _____ eine Zeitung _____	*lesen*
4 sie _____ in einem Hotel _____	*bleiben*
5 wir _____ in London _____	*wohnen*
6 ihr _____ ihre Hausaufgaben _____	*machen*
7 Sie _____ das Auto _____	*waschen*
8 sie _____ um 8 Uhr _____	*frühstücken*
9 er _____ Zeitungen _____	*austragen*
10 wir _____ im Garten _____	*arbeiten*
11 _____ Sie viel Geld _____?	*verdienen*
12 ich _____ meiner Mutter einen Geschenk _____	*geben*
13 _____ ihr Brot _____?	*kaufen*
14 sie _____ den Dom _____	*besichtigen*
15 sie _____ ihre Oma _____	*besuchen*
16 _____ du Geld _____?	*sparen*
17 wir _____ um 10 Uhr _____	*kommen*
18 sie _____ später _____	*ausgehen*
19 was _____ er _____?	*bestellen*
20 du _____ in der Kälte _____	*frieren*
21 Nach der Schule _____ sie _____	*fernsehen*
22 ich _____meine Katze _____	*fotografieren*
23 Der Mannschaft _____ _____	*gewinnen*
24 Wann _____ Sie _____?	*kegeln*
25 _____ ihr _____?	*mitkommen*
26 wir _____ einen Kuchen_____	*backen*
27 ich _____ am Samstag _____	*radfahren*
28 sie _____ nach Southend _____	*reiten*
29 er _____ Münze _____	*sammeln*
30 _____ Sie im Sportzentrum _____?	*schwimmen*
31 sie _____ im See _____	*segeln*
32 sie _____ in der Schweiz _____	*Ski fahren*
33 ihr _____ am Wochenende _____	*spazieren gehen*
34 wir _____ Tischtennis _____	*spielen*
35 _____ du in der Disco _____?	*tanzen*
36 Wann _____ wir uns _____?	*treffen*
37 _____ du viel Sport _____?	*treiben*
38 ich _____ Klavier _____	*üben*
39 Wie _____ ihr ins Kino _____?	*fahren*
40 er _____ sein Wörterbuch _____	*vergessen*

Word Order Activity

Name:_____

1 werde ich nach Deutschland fahren
2 einen Kuchen du backen wirst
3 Geld sparen er wird
4 auf einem Campingplatz im Juli bleiben wir werden
5 fahren Sie werden nach Southend ?
6 meinen Hund wird er fotografieren
7 essen werden sie Pizza
8 ihr sammeln Teddybären werdet
9 wird sie die alte Kirche besichtigen
10 Gitarre üben am Montag wir werden
11 mit dem Zug werden in die Stadt sie fahren?
12 mitkommen wir am Donnerstag werden
13 wohnen wirst in Berlin du
14 Milch zum Frühstück ich trinken werde
15 kommen sie nach der Schule wird
16 eine Jacke werde ich kaufen
17 meiner Mutter helfen den ganzen Tag ich werde
18 das Kaninchen Karotten essen wird
19 eine Pizza das Mädchen wird bestellen
20 ausgehen werdet um 10 Uhr ihr



zur Bibliothek gehen

ein Buch leihen

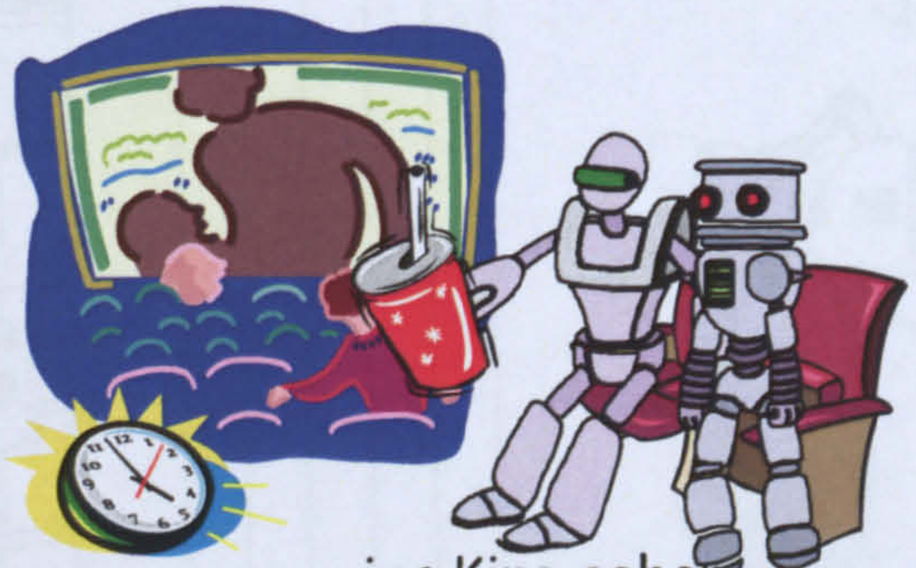
sich mit seinem Freund treffen

mit dem Bus in die Stadt fahren

zum Café gehen

Pizza essen

Orangensaft trinken

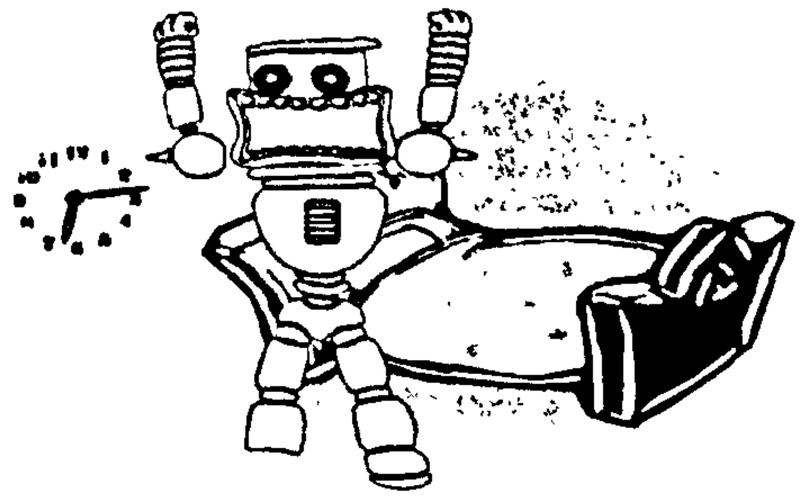


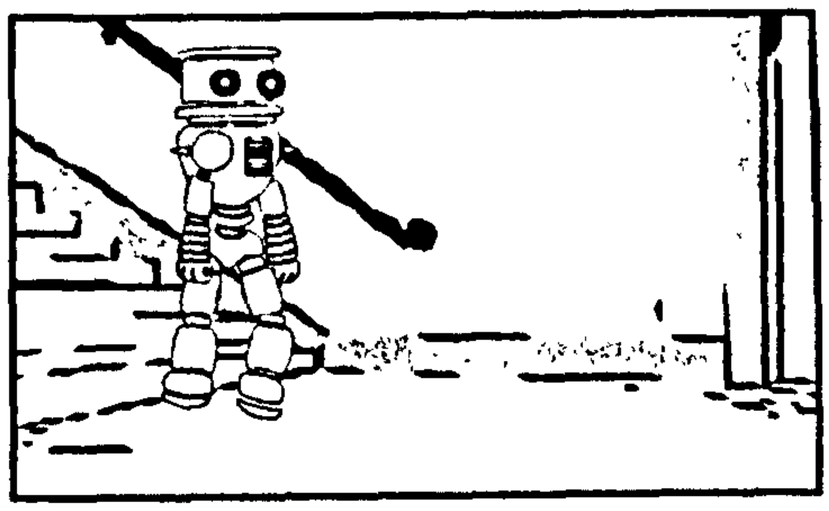
ins Kino gehen

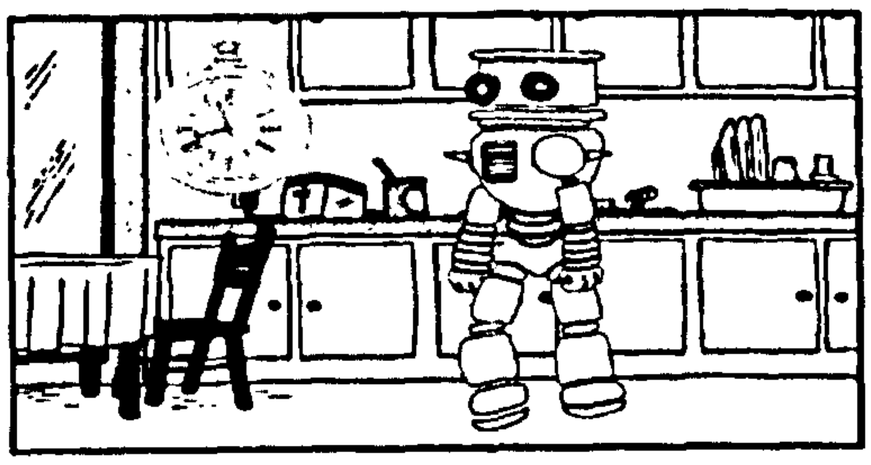
einen Film sehen

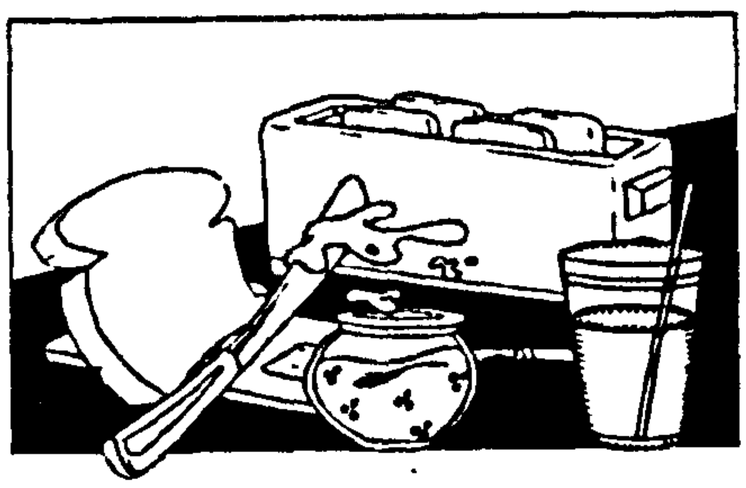
Picture narrative (individual)

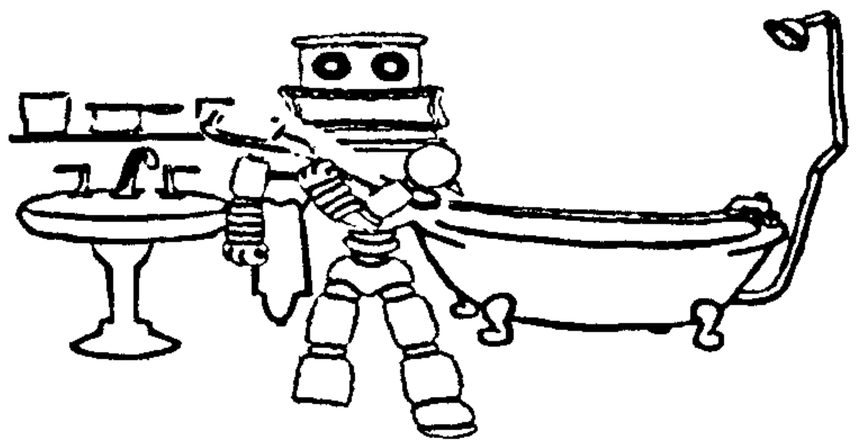
Was wird Robert der Robot heute machen?

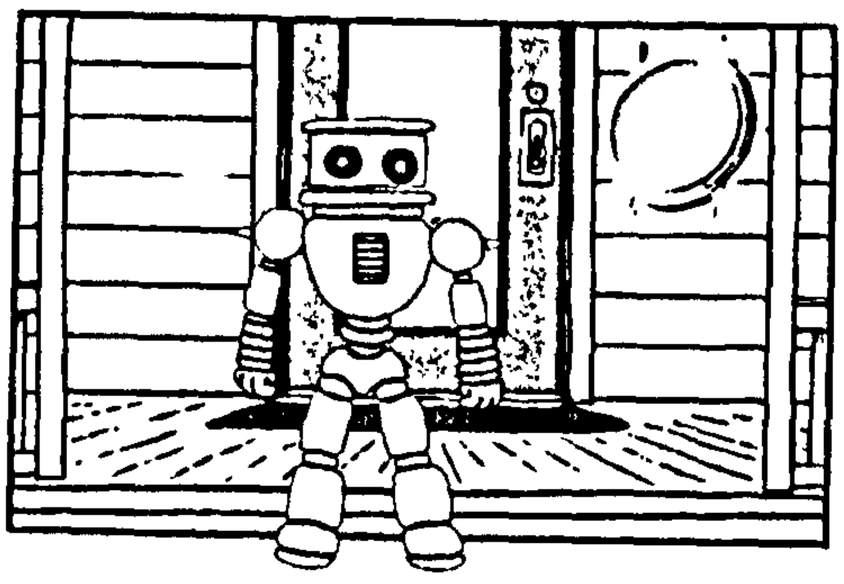


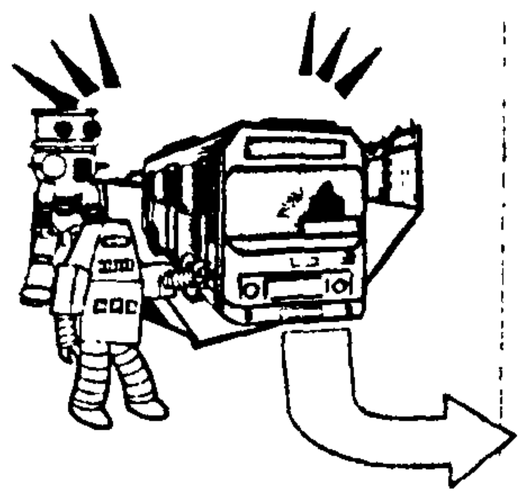


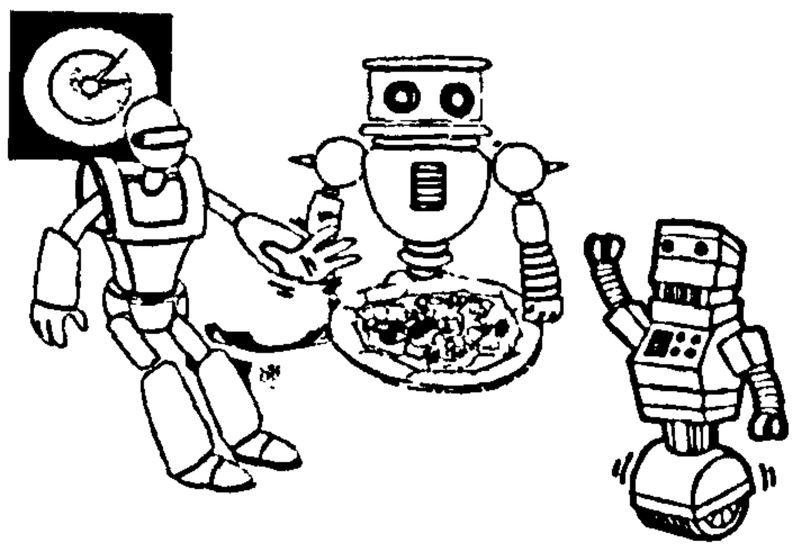


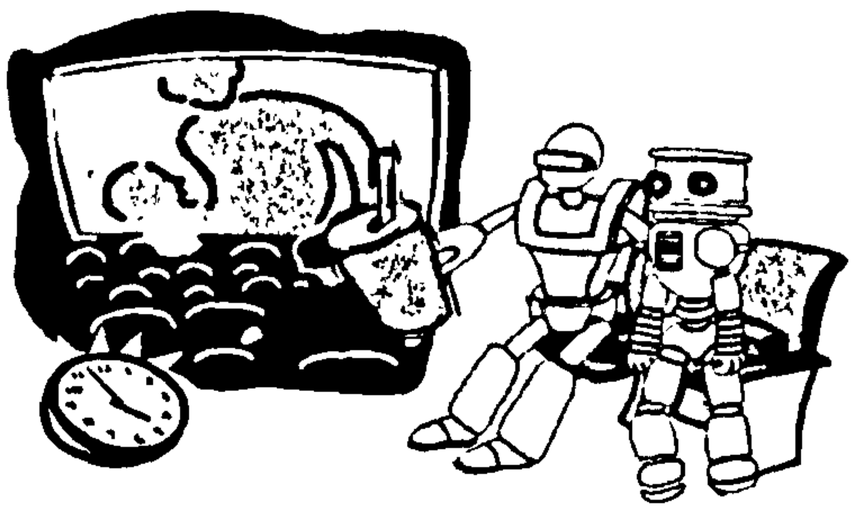


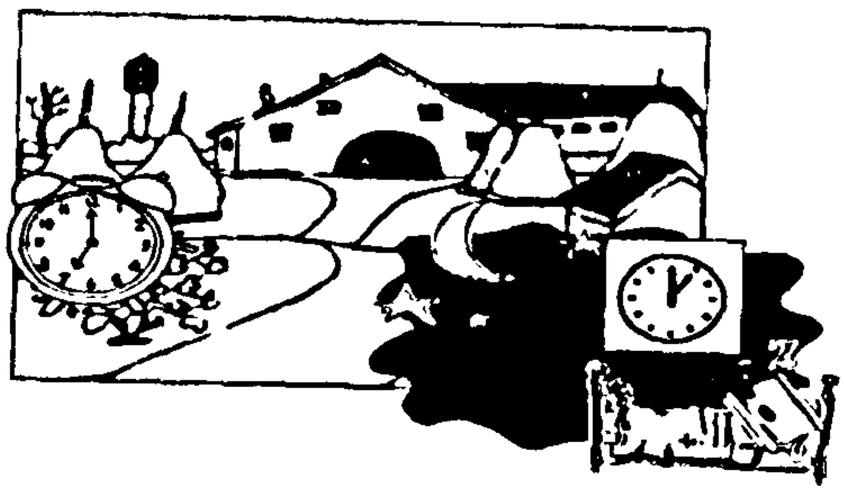












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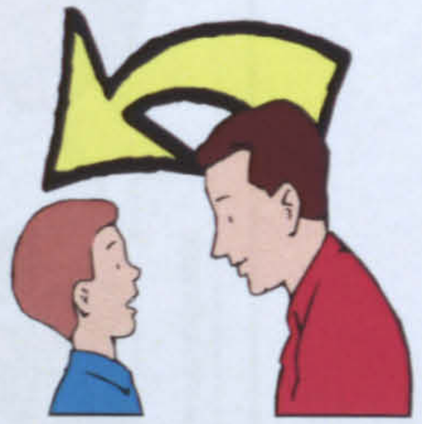

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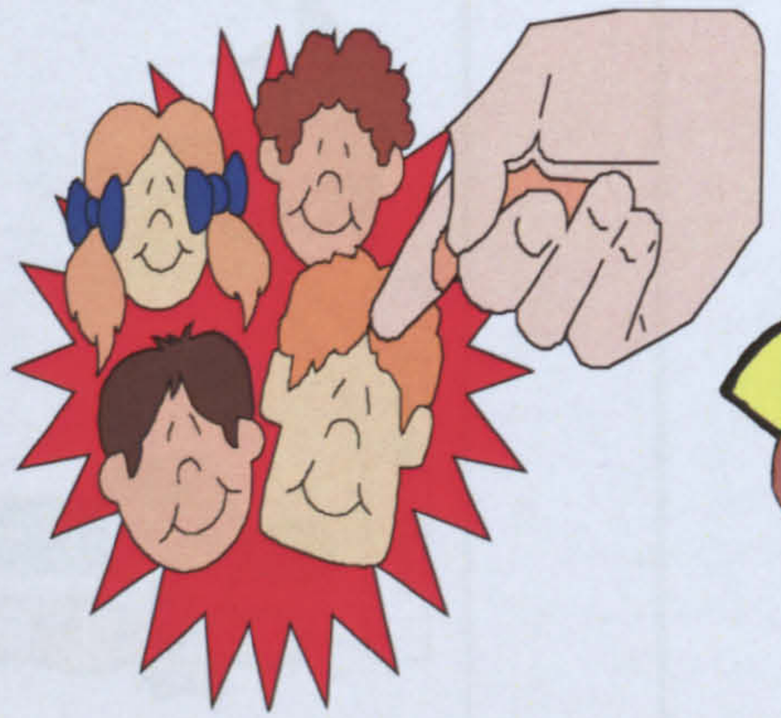


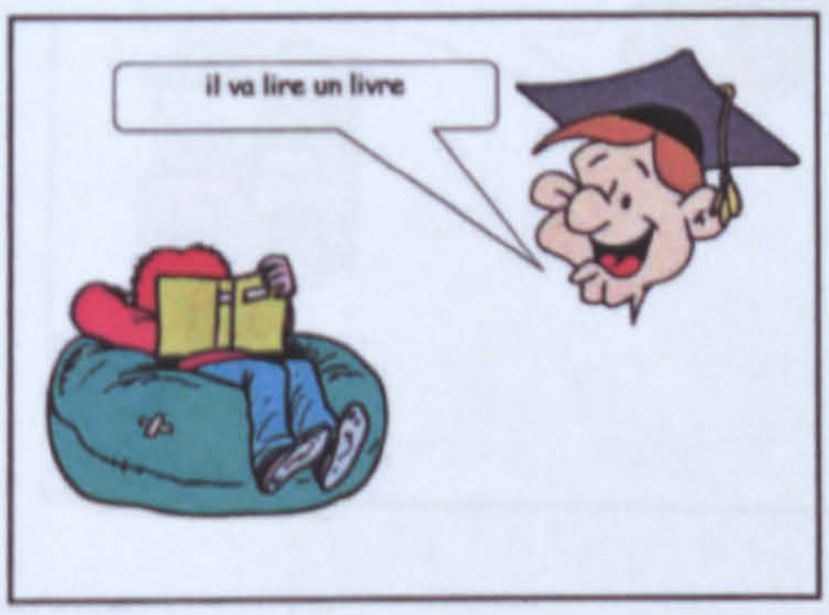
vous

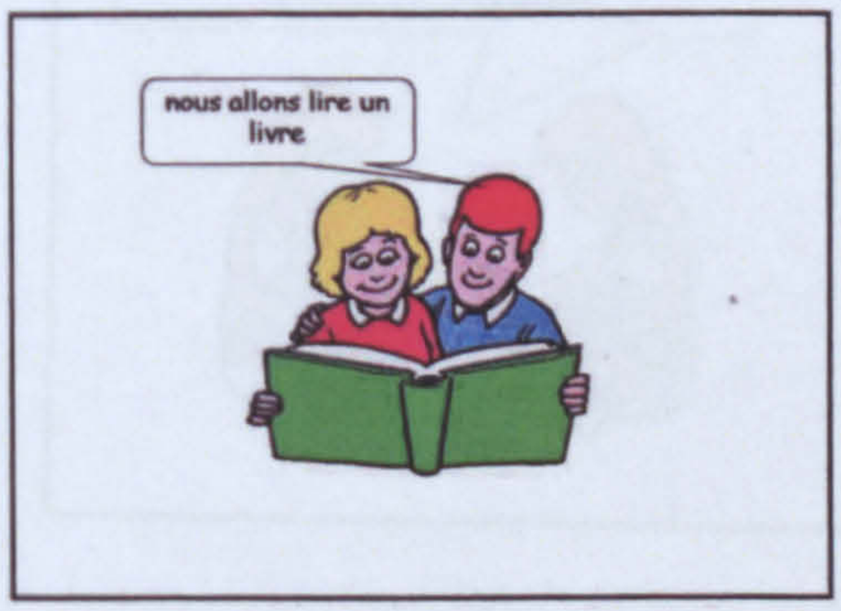
vous

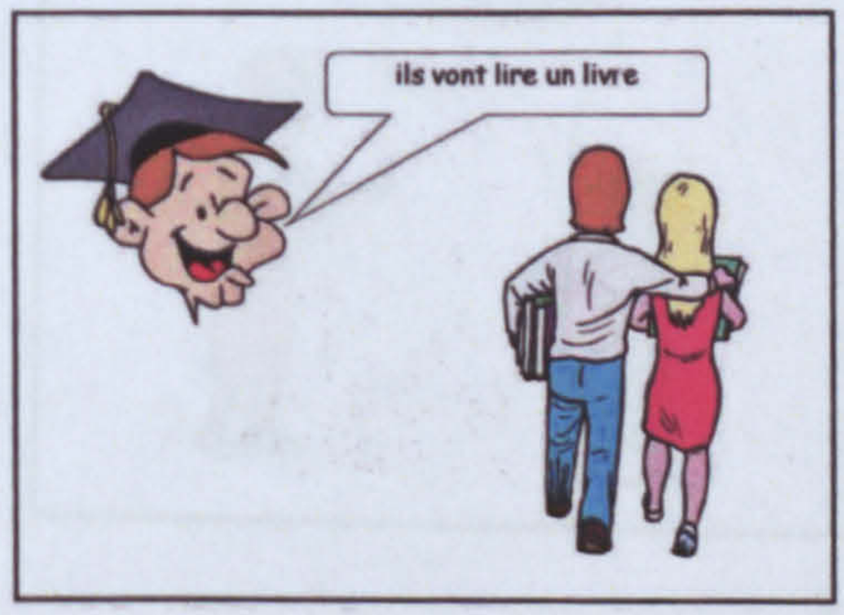
ils/elles

Annelies Taylor U4834226

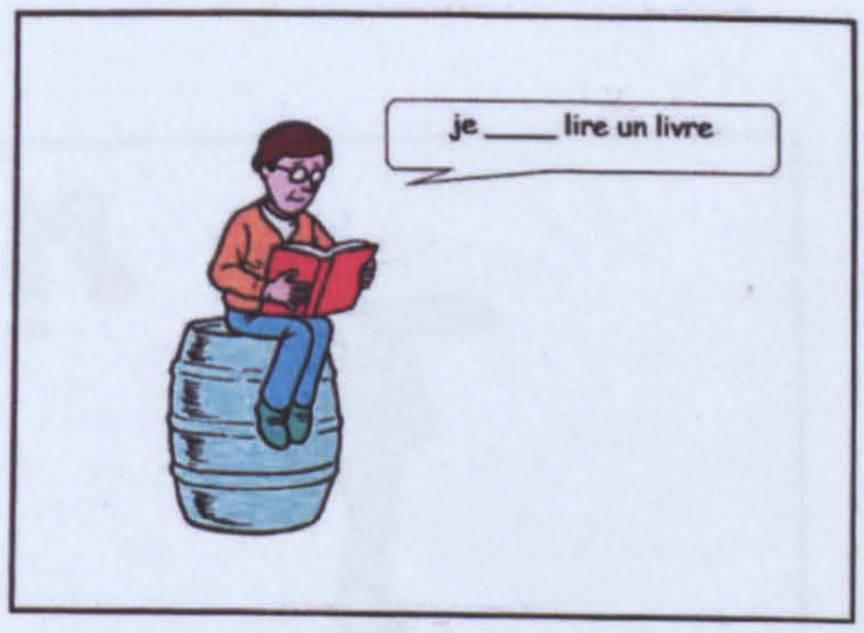
Lire – sample slides

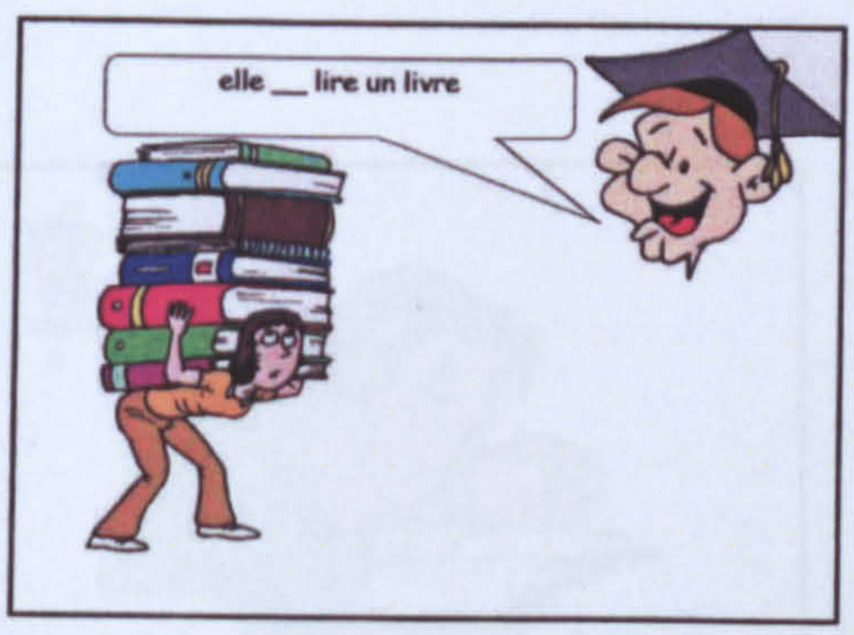


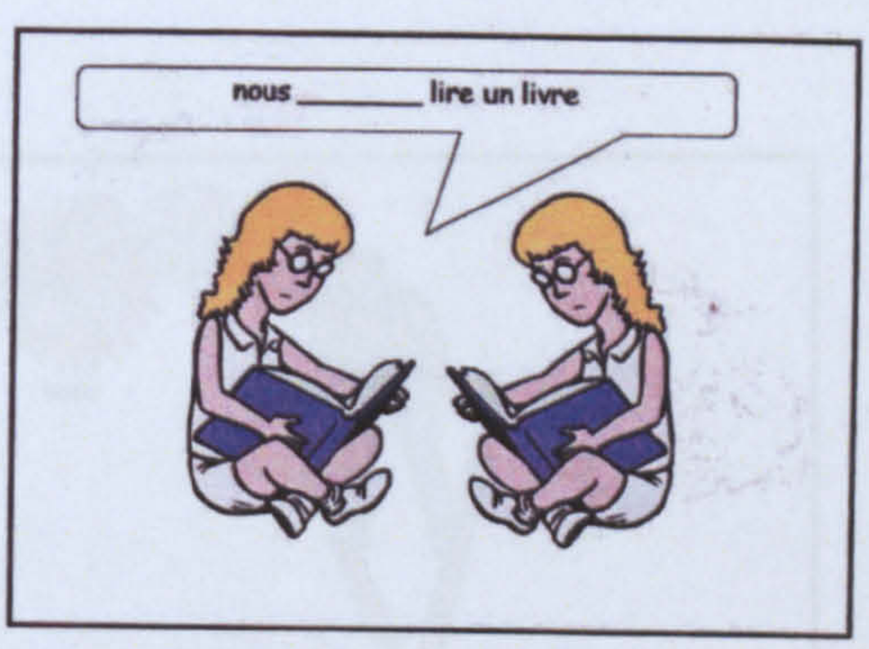


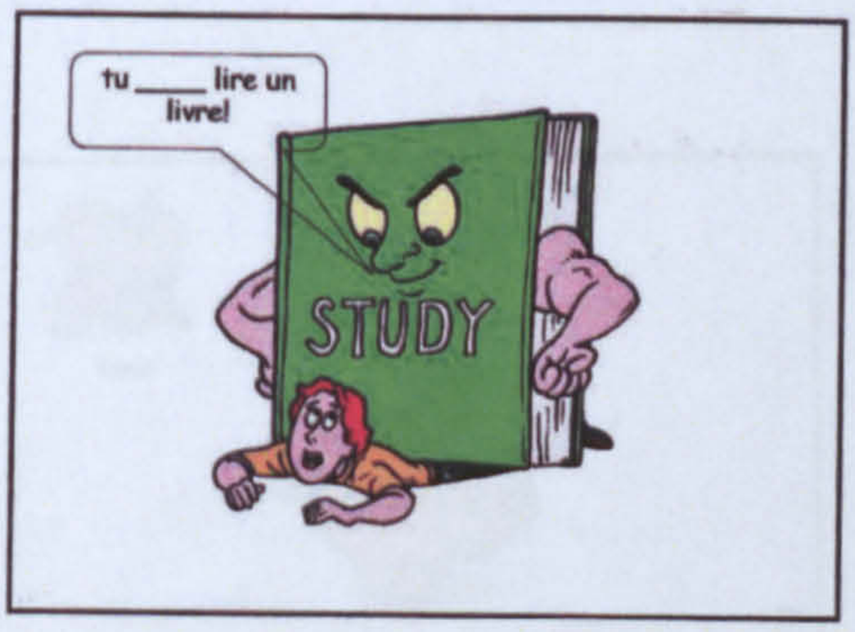



il ___ lire un livre


je ____ lire un livre

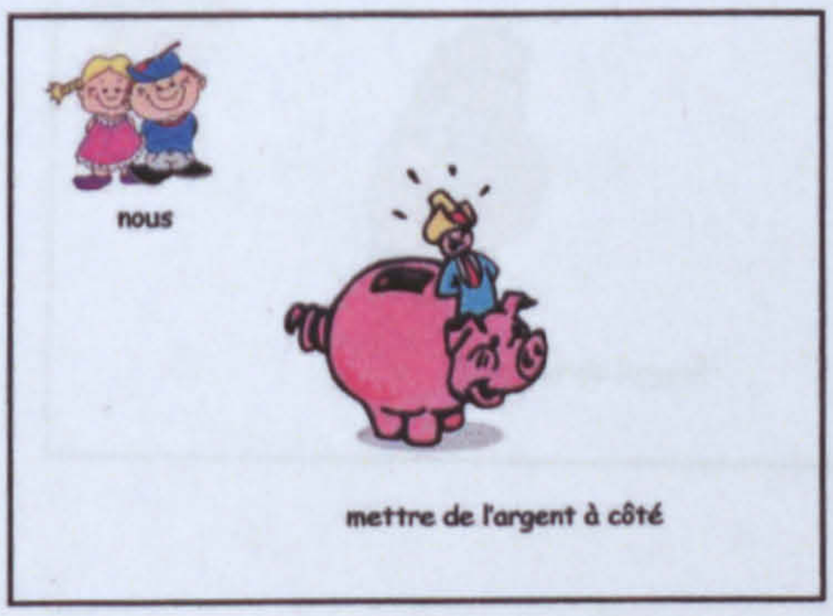

elle __ lire un livre


nous _____ lire un livre


tu ____ lire un livre!
STUDY


vous_____ lire un livre

Missing words – sample slides



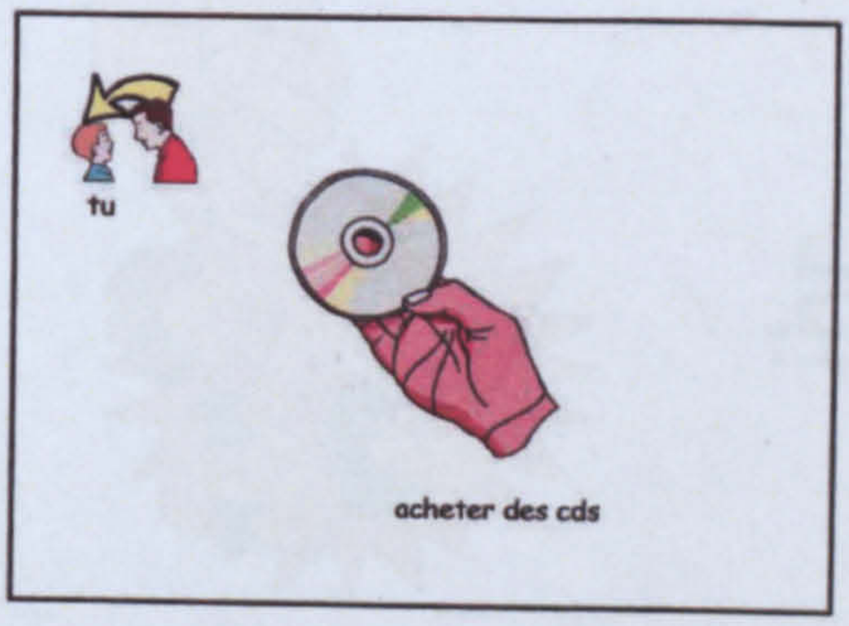

ils
jouer au golf


ils
acheter des cadeaux


nous
jouer au foot


je
faire du vélo


vous
dépenser de l'argent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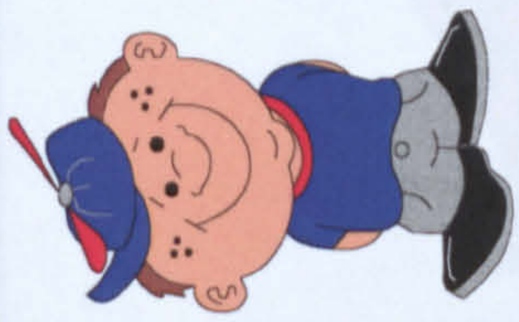
Pronouns



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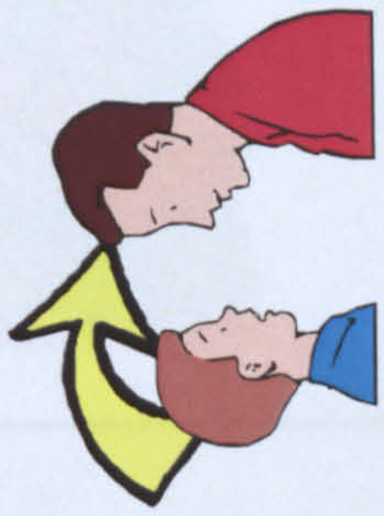

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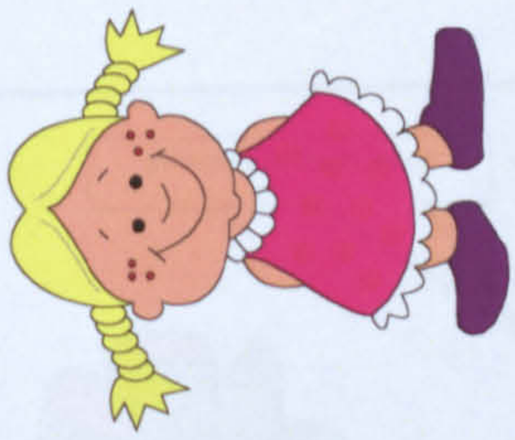

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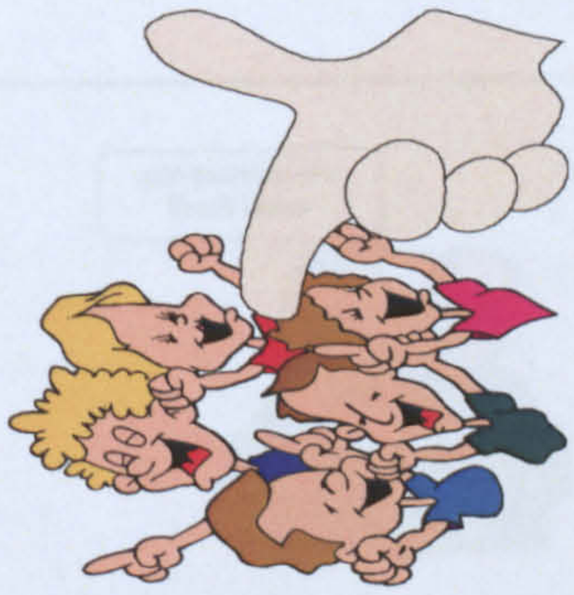

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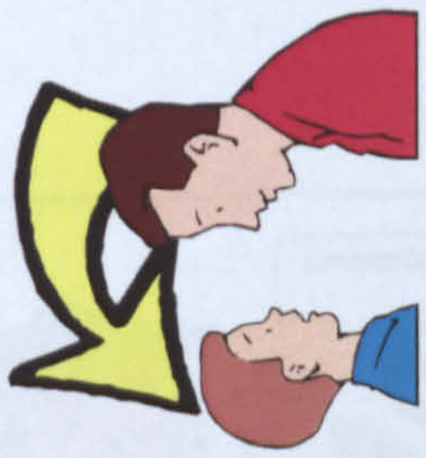

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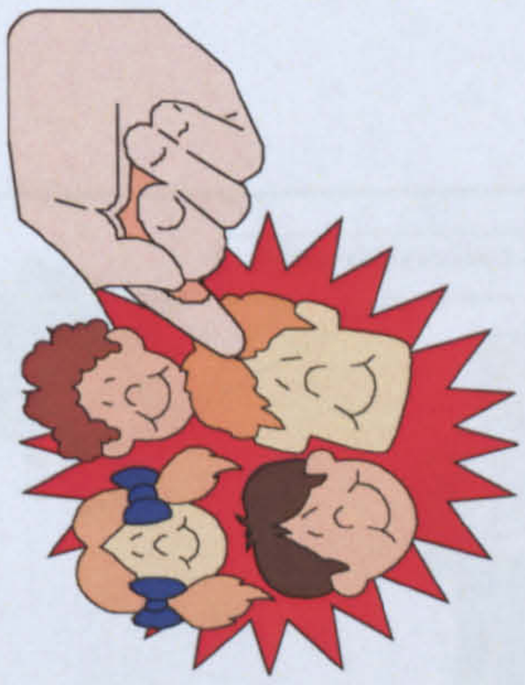

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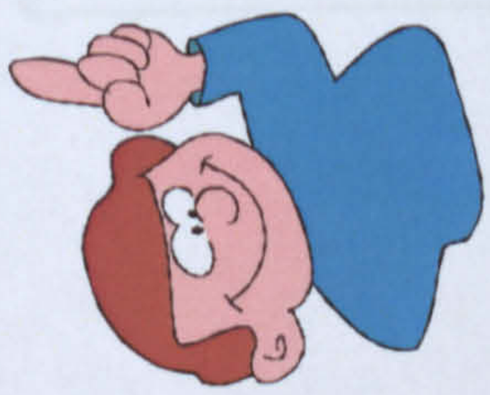

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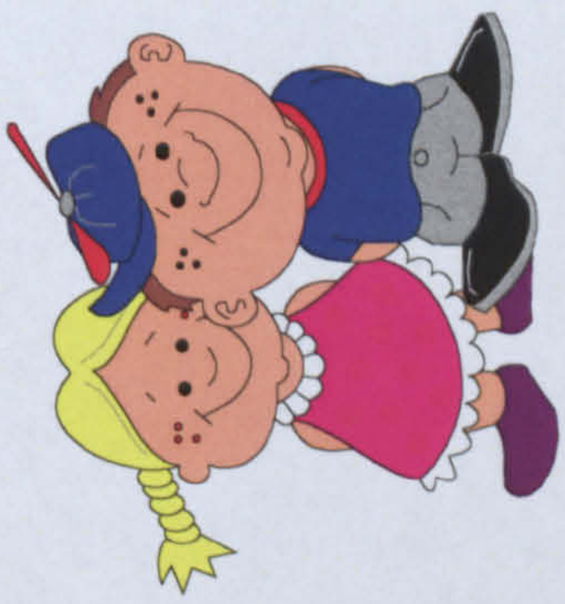

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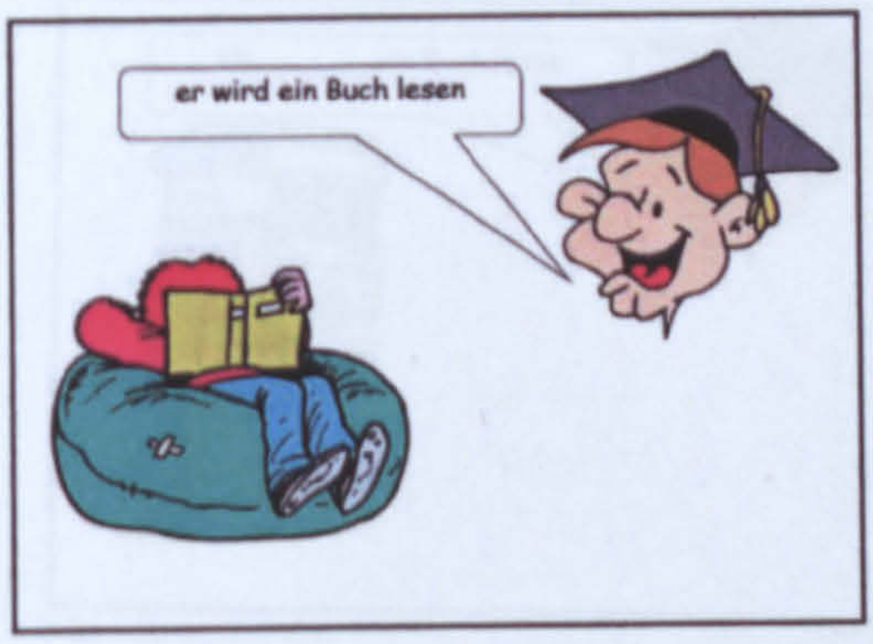
Lesen – Sample slides

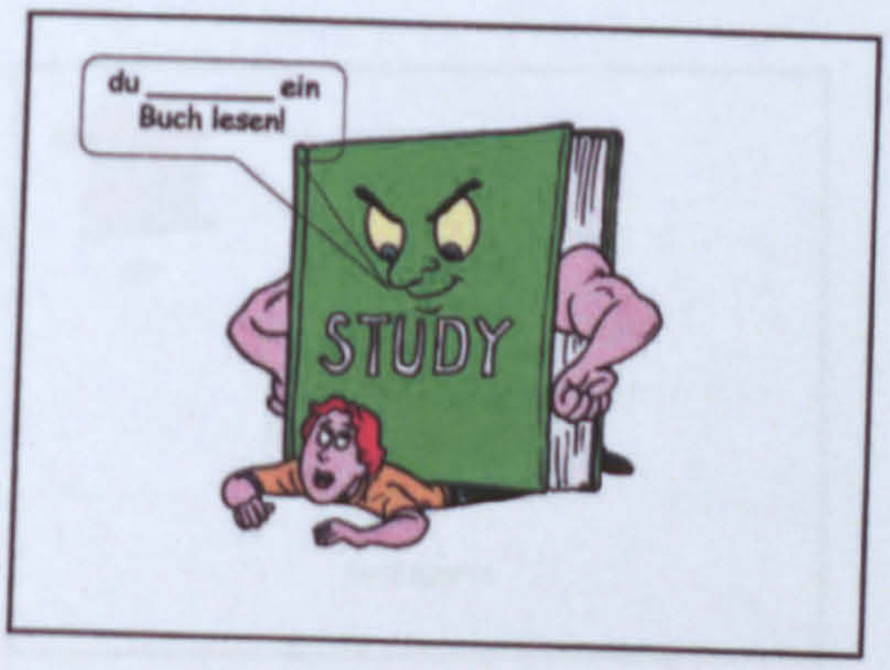



er _____ ein Buch lesen


ich _____ ein Buch lesen

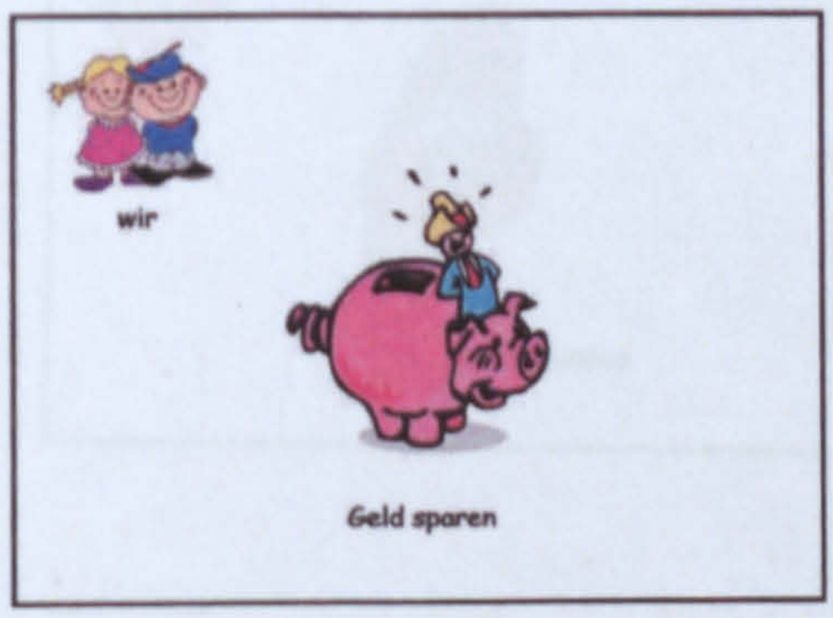

sie _____ ein Buch lesen


Wir _____ ein Buch lesen


du _____ ein Buch lesen!
STUDY


Sie _____ ein Buch lesen

Missing words – sample slides




sie
Golf spielen


sie
Geschenke kaufen


wir
Fussball spielen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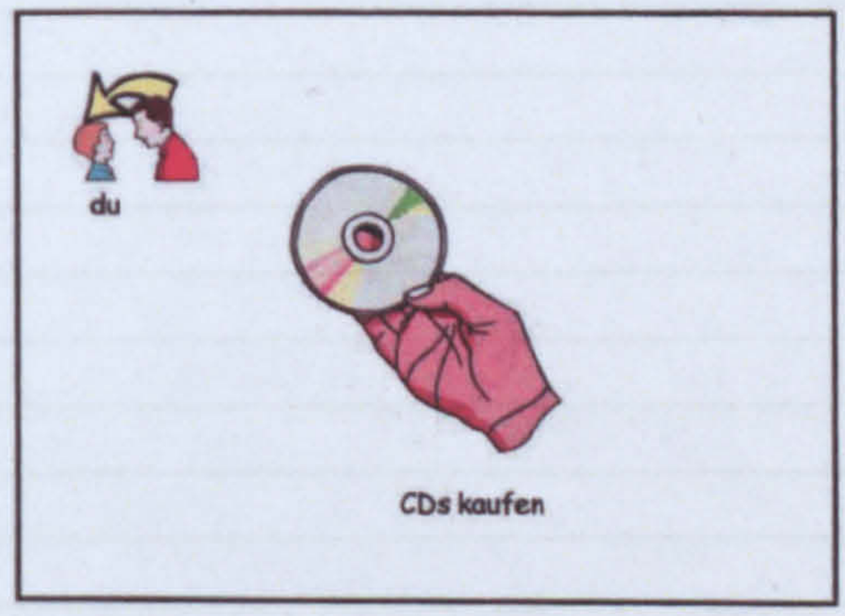
radfahren


ihr
Geld ausgeben


du
CDs kaufen

Appendix 17 Sample of Transcript

26 June 2008 German Deductive group 1 girls

Gap fill

The names of the 4 girls have been removed to maintain anonymity

Task 2

Girl 2	it is really quiet
Girl 1	ok right task 2
Girl 2	right. this one goes last.. ich something Pizza essen
Girl 1	if we look on the sheet
Girl 2	yes, let's look on the sheet
	(laughter)
Girl 2	it should be werde
Girl 1	ich werde ich werde
	(whisper)
Girl 1	you have to speak on the tape
Girl 3	sorry
Girl 2	du .. du.. du.. du
Girl 4	ay.. du
Girl 2	em.. du don't take the mick, take this seriously
Girl 1	if we look on the sheet
Girl 3	I am looking on the sheet
Girl 2	I think it must be wirst (German accent)
Girl 4	right..
Girl 3	er.. is essen at the end?
Girl 2	yeah
Girl 1	wirst is last
Girl 3	what is last?
Girl 2	I think it is wirst
Girl 4	where's my sheet?
Girl 1	I think that's yours
Girl 4	thank you
AT:	why is it wird?
Girl 2	it is on the sheet
AT	how do you know it goes second and not last?
Girl 2	cause that's a verb
AT:	well done.. that's just what I needed to hear you say.
Girl 1	emmm sie wird again
Girl 3	and blieben goes last cause its a verb
Girl 1	say what you are doing
Girl 3	wir..
Girl 2	werden.. werden in London
Girl 4	what do these words go last?
Girl 2	cause they are verbs
Girl 1	why don't we do this first, and then come back to this?
Girl 4	em no. they might not all be the same
Girl 3	oh yeah
Girl 4	ihr werdet
Girl 2	I am watching those.. last cause it is a verb

Girl 3	it smells where you are
Girl 4	it is you!
Girl 3	I don't smell!
Girl 4	yes.. its you!
Girl 1	what number are you on?
Girl 2	I am on 8 – I am on 7
Girl 3	cant be, you must be on 8 cause you have done..
Girl 1	oh yeah.. I am on 9 now
Girl 3	I need to go potty now
Girl 4	he is going out with..
Girl 1	so we are on number 10
Girl 2	what one is first?
Girl 1	it is wird
Girl 2	no, its not, it is werden. cause it is a question
Girl 1	oh yeah., cause it is a verb
Girl 3	why have you got that twice
	(sneeze)
Girl 2	so that is austragen
Girl 1	you know number 11 – which way does it go?
Girl 2	werden Sie.. werden goes first cause it is a question..
Girl 4	wird
Girl 1	which one goes first then? that one or that one?
Girl 4	what?
Girl 3	the verb?
Girl 2	you have to talk! it is getting lonely
Girl 1	you are the one who keeps talking
Girl 4	yeah – brilliant idea
Girl 3	yeah – as she said, it is a brilliant idea
Girl 1	this thing better be on
Girl 4	I know, it is a good thing
Girl 3	in a way
Girl 4	everybody in the class goes silent
Girl 3	we are not in a class, we are in a posh hotel
Girl 4	oh yes, - we are in a posh hotel
Girl 2	.. what is it?
Girl 1	sie werden? or sie wird?
Girl 3	because it's a verb!
Girl 2	no.. is it sie wird? or sie werden?
Girl 2	in German you are meant to sound German
Girl 3	it is just note taking
Girl 4	he's stalking us
AT:	finish the sentence you are on please
Girl 2	How do you stop it?

Appendix 18 Sample of transcript group discussion - Plenary

Group discussion following main Robert the Robot task (day 2)

AT	Ok.. you asked me a lot of questions today and yesterday, so what exactly do you want to know? Melanie:
Melanie	Who has been the best so far?
AT	Wwho has been the best so far? of the boys? or the girls? or the different classes?
Melanie	the boys and the girls
AT	Do you know, that is really difficult to say, because in some parts of the test, the girls have done better, and in other bits, the boys have done better.
Girl	we have done better in that bit
AT:	in the one just before that? in the big test with all 40 things, the boys between you, now there were two teams of boys, the one filling in all the 4o sentences – now the boys got ... 65 right, and the girls got 63 right, so it is really really close... but...
John	what did our group get?
AT:	I am not going to tell you what the different groups got
various	oh, why?
AT:	because they didn't have their names on them – they were anonymous, so I cant tell
various	we know.. we know out handwriting
AT:	what about the test we did yesterday? the gap filling one, and then the word order one? Who do you think did better in that?
Luke:	the girls
AT:	why do you think the girls, Luke?
Luke:	the boys were messing around
AT:	yes, the boys were messing around a lot. Now, the girls, why do you think the girls did better?
David	They took it more seriously
AT:	do you think that that is an issue in class? Do the girls. cause some of you said yesterday when we started off, some of you put your hand up to say that the girls do better than the boys, do you ...
David	everyone put their hand up to say the girls do better than the boys
AT:	why did everyone put their hand up to say the girls do better than the boys?
	various shouting out
AT:	Hang on a minute, we are not going to shout out – Kelly:
Kelly:	Cause the girls pay attention and the boys just muck around
AT:	cause the girls pay attention and the boys just muck around – is that a good reason?
boys:	and the reason why we knew the girls were going to do better is that the boys just muck around
boy:	and some people are quite naughty in class.
AT:	there are always boys who are well behaved and girls who are a little naughty, so it is not a generalisation , thank you, - you cant say across the board that girls do better in everything because they focus more. Do you remember – the very first activity we did yesterday, where I had all those pictures and I was asking you to put your hand up – who was putting their hands up – the boys or

	the girls?
	shouts
AT:	hands up, don't shout out
chorus:	boys boys boys
AT:	it was the boys that put their hands up, and it as only when it was when we were on about slide 14 that Melanie put her hand up, and then some of the girls started putting their hands up... yes, and Georgia as well.. but.. it is mostly the boys – and again, in all the activities that we do, who puts their hands up first – girls or boys
chorus:	BOYS, boys
AT:	the boys – why do they put their hands up first, even though you have just told me that girls do better, so why do boys put their hands up first? Georgia?
Georgia:	I think girls get more embarrassed about it, and boys don't really care
AT:	so hang on a minute – you say that the girls get more embarrassed, ok. so this is an interesting point, so girls, you get more embarrassed about it, even though you KNOW you know the answer – so what are you getting embarrassed about?
	mumble
AT:	is it embarrassed that you are going to get things wrong?
Jenny:	about saying it in German.. yeah
AT:	right – do the boys care about their pronunciation? ... cause, do you remember yesterday when they were doing it, I had to correct every single one of their pronunciation – so why is it that boys don't care?
	mumble
AT	Hang on.. Chris:
Chris:	well girls like more writing, but boys like more discussion.
AT:	why do boys not like writing then?
Shane:	it is annoying – boring
AT:	it is annoying and boring? what is annoying and boring about it
Shane:	yeah –well.. you have to actually pick up your pen and write.. but when you are having a discussion you can actually speak, rather than writing loads down.
AT:	Is that because, Danny. that is an interesting point – is that because writing is too slow...
Danny:	yeah
AT:	or is it because conversation is more interactive?
chorus	yeah
Danny:	interactive – and well cause writing is so slow
AT:	so both of those reasons you would rather.. that is an interesting point – now, girls tell me that they spend a lot more time on msn and texting than boys, but that is the interactive bit on msn – yes, you are right that that is interactive – if you were able to have a discussion on msn in German in a German class, would you do more?
	various – no., yeah
AT:	so you would still want to have a discussion?
Chris:	well if we had a computer each and we could go "Das ist "... then yeah.

AT	would that work better for you Danny?
Danny:	yeah. it would be alright..
AT	but it is bringing in the idea of writing it down AND having a discussion. You would still want to talk it out loud, instead of writing it down.
	mumble
AT:	Sam...
	mumble..
AT:	listen a minute
Sam	(mumble)
AT:	you would rather just talk it out – why would you rather just talk it out?
Sam:	cause it is like.. you know what they think
AT:	so you get instant feedback if you say it out loud
boys:	yeah yeah
John:	but when you send a letter off you got to wait for ages – you don't get a straight back answer straight away
Alex:	it sticks in your head
AT:	it sticks in your head more. Girls what do you think about all that?
girls:	what?
AT:	the boys want an instant feedback – they want to speak because when you speak you get an instant answer – you know if you are right or wrong
	mumble
Chloe:	they are not patient
AT:	you re right, they are not patient. What do you think – would you rather have that?
Shannon:	I would rather have that;;
boy:	yeah.. well you say that..
Sophie:	I would rather hear ....
AT:	what if we were to have a lesson with just girls in it – would you talk more then?
	mumble
Alex:	if the lesson were just girls (mumble)
Melanie:	I think it would be calmer an' all
John:	calmer?
Emily:	the boys are a bit stupid
Alfie:	girls are a bit stupid!

Appendix 19 Sample of Individual Interview

Inductive French Interview with Matthew

AT	What have you learned in the past few lessons?
MATTHEW	I have learned to recognise the je and the tu and the pronouns
AT	What was the purpose of the lesson – can you remember?
MATTHEW	The purpose?
AT	Were we talking about things that had happened or things that were going to happen?
MATTHEW	Oh... past and future
AT	Can you describe how you learned it? .. Thinking carefully about what you did, can you describe how you learned it?
MATTHEW	Well...we had the sheets and the accents and al that on the top, so I learned it by – you know the boxes – well I just followed them and tried to ..
AT	So, you had a reference sheet in front of you and you tried to..
MATTHEW	yeah
AT	you just needed to look to see what the reference said and apply that to different situations
MATTHEW	yeah
AT	Ok – what examples were you given to follow? Well we just talked about that. you had a reference sheet
MATTHEW	yeah
AT	You had another reference sheet? As well – the one with the common verbs on it – was that useful?
MATTHEW	yeah – it was actually
AT	Why was it more useful?
MATTHEW	Cause it gave you like.. more ideas and options and that
AT	how much of the information did you understand
MATTHEW	Well. most of it cause I learned it with Mr Richards so, I would say about 70%
AT	Was there anything that you found difficult?
MATTHEW	the bit that I found difficult was today's test – you know on the board, it was going really quickly and I had to think about it quickly
AT	Do you think is it a good idea to get you to think about things really quickly?
MATTHEW	yeah, because it gets you up against the time pressure and you have to do it
AT	Was it a good idea to get you to work in groups today?
MATTHEW	yeah
AT	You know yourself, the whole group was shouting out, il va, il va..
MATTHEW	yeah
AT	Were there things that you found very easy?
MATTHEW	there were some bits that were very easy, and some bits that were hard – but mostly it was hard
AT	What could I have done differently to make it better for you?
MATTHEW	probably – err probably slowed the board down
AT	Ok. That was the only thing – what about the other test - the writing task?
MATTHEW	I found that actually quite difficult – cause the bits were on the board, and I copied some of the bits down, and I added some of Matthew own bits a well – but I had actually forgotten Matthew French dictionary today by accident so that made it a bit hard for me but I think I got a lot of it
AT	So on that one, if you split the robot task into two parts – the first bit was trying to get the 'il va' and the second bit was trying to get the vocabulary, which bit of those two was the easier of the two?
MATTHEW	I would say the 'il va'
AT	Because you knew what you were doing there?
MATTHEW	yeah
AT	So the only thing that held you back was all the other words?
MATTHEW	a-ha
AT	So, would that lead you to believe that you have actually learned the future tense?
MATTHEW	I would say so, yeah
AT	what you have to do now is to pick up the extra vocabulary to get through
MATTHEW	yeah
AT	I would tend to agree with that, well done! Ok, thanks for your help with that, well done!

Appendix 20 Revised lesson structure

Initial Study Lesson Structure		Revised Lesson Structure	
Deductive group	**Inductive group**	**Deductive group**	**Inductive group**
Group work carried out in mixed groups		Group work carried out in single-sex groups	
Lesson 1 20 Minutes explanation: • examples of pronouns; • structure of *werden;* • distribution of reference. sheets.	Lesson 1 20 minutes explanation: • examples of pronouns; • examples of use of *werden;* • 16 sample sentences, using one verb only to consolidate structure; • 40 sample pictures and sentences.	Lesson 1 40 Minutes explanation: • structure of pronouns; • structure of *werden*; • distribution and explanation of reference sheets; • 20 sample pictures • rules of word order.	Lesson 1 40 Minutes explanation: • examples of pronouns; • examples of *werden;* • broader selection of sample sentences, initially using one verb to consolidate structure, but gradually incorporating a wider range of verbs; • 80 sample pictures and sentences; • ask students to identify any patterns that they see in the sentence structure.
8 minutes: cloze test	8 Minutes: cloze test	8 Minutes: group work - word order	8 Minutes: group work - word order
8 Minutes: group work – word order	8 Minutes: group work – word order		
12 Minutes: group work- picture narrative	12 Minutes – group work – picture narrative		

Initial Study Lesson Structure cont'd	Revised Lesson Structure cont'd	Initial Study Lesson Structure cont'd
Lesson 2 – Post-testing 10 Minutes: question and answer session identifying pictures 30 Minutes: picture narrative , working individually, with no reference sheets or other supporting materials.	Lesson 2 10 Minutes: revise previous lesson's work – ask students to explain rules and structure.	Lesson 2 10 Minutes: revise previous lesson's work, by giving picture narrative examples. Ask students to identify patterns that they see in the sentence structure.
	8 Minutes: cloze test to be completed individually	8 Minutes: cloze test to be completed individually
	20 Minutes: group work - picture narrative.	20 Minutes: group work - picture narrative.
	10 Minutes: group presentation of picture narrative task. Peer assessment and correction of task.	10 Minutes: group presentation of picture narrative task. Peer assessment and correction of task, and group definition of rules.
	Lesson 3 – Post-testing	
	10 Minutes: question and answer session identifying pictures 10 Minutes: explanation of picture narrative task, question and answer session to elicit possible responses for each picture. 20 Minutes: picture narrative, working individually, with access to reference materials from previous lessons only.	